POLITICAL ECONOMY

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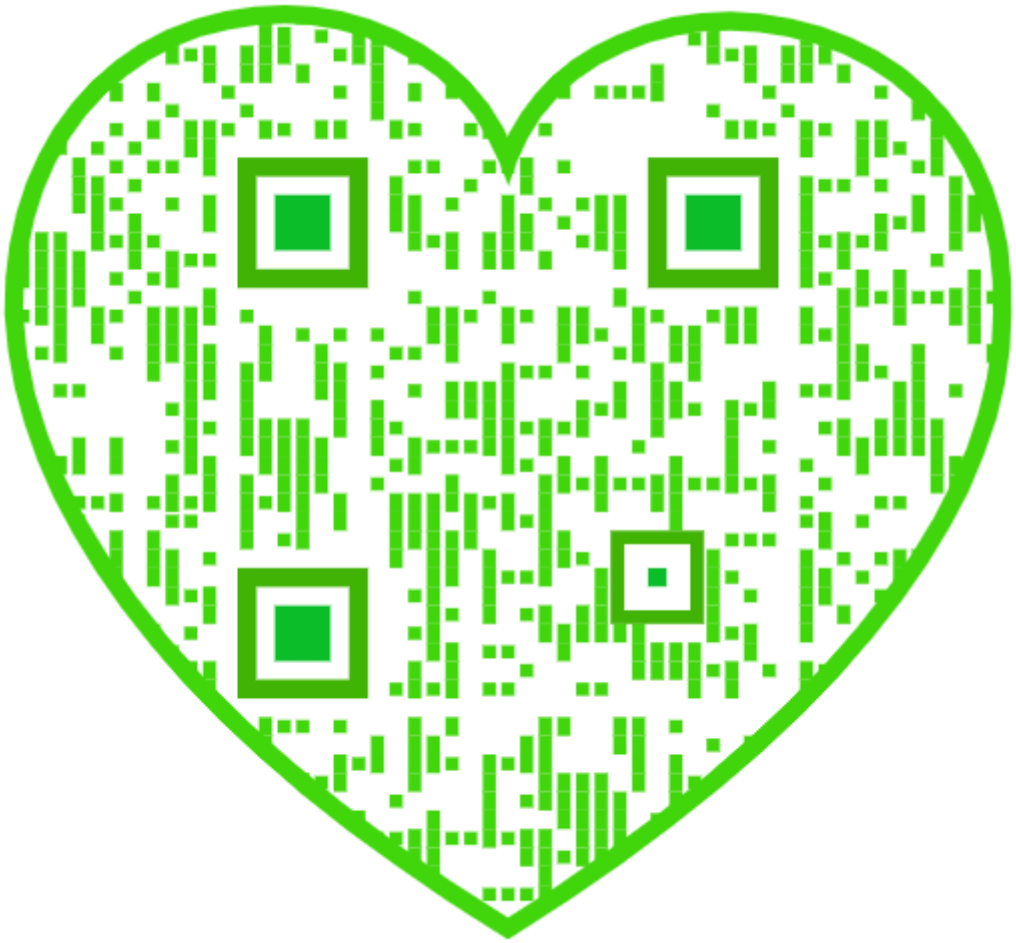

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POLITICAL ECONOMY

Designed for Use in Catholic Colleges, High Schools and Academies

BY

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AMERICAN BOOK COMPANY

NEW YORK CINCINNATI CHICAGO

HB171
.5
B978
1922

Imprimí Potest.

JOSEPH F. HANSELMAN, S.J.,
Provincial Maryland-New York Province.

Nihil Obstat.

REMIGIUS LAFORT, D.D.,
Censor.

Imprimatur.

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Archbishop of New York.

NEW YORK, September 8, 1912.

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PREFACE

THE purpose of this book is to present a general view of Political Economy with its various topics and problems, so as to enable the student and the general reader to understand the political and social questions that form matter of daily discussion. A special feature of the work is to show the Catholic doctrine wherever the subjects enter into or touch on the domain of Ethics. No particular effort has been made to bring in Catholic dogma or teaching. When the subject naturally introduces Catholic principles, they have been dwelt upon with the detail that has been thought necessary.

Free use has been made of the numerous works on Economics already published. It would be impossible to enumerate all the authors who have been a help in the writing of these pages. Where immediate assistance has been found, credit is given to the sources, as far as possible.

The book is the result of many years' teaching in the classroom, and no little credit is due to the intelligent and critical audiences the author has had during the time he taught the subject at Holy Cross College.

No attempt has been made to pass judgment on all the various points that come up for discussion. It is not believed that a book of this nature should take sides on all open subjects that may appeal differently to different individuals. The book is designed to reach the minds of young people yet in a formative state, and its purpose is not to incline their opinion towards either side of disputable questions. The exposition of the principles of a science is one thing, the full practical application of each of those principles to actual cases is another. Hence the

endeavor has been to present both sides in all subjects that are recognized as matter of legitimate discussion, and to allow the reader to form his own opinion or judgment on the matter.

The author takes this occasion to thank very sincerely those whose encouragement has made the publication of this volume possible, and to express his obligations to the writers on economic subjects of whose works he has freely made use.

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POLITICAL ECONOMY

CHAPTER I

DEFINITION. METHOD. SCHOOLS

I. Definition of Political Economy

Definition and Explanation. — There are as many definitions of Political Economy as there are treatises on the subject. It would be useless and confusing to detail them all. It is essential, however, to formulate some definition, which may explain the view we are going to take of the science.

A definition of a science may be arrived at through the consideration of the subject matter of the science. Now, some economists conceive that the subject matter of the study of Political Economy is restricted to wealth and the processes by which wealth is produced, consumed, and distributed. They do not take account of man or of society or of the higher interests of the moral order. They formulate their definition of the science in accordance with this view.

Other economists conceive the subject matter of Political Economy to embrace human activity in its relation to the wealth-producing factors of the world. They hold that the activity of man as well as the end of that activity comes within the scope of the science.

We take this second view. We consider that Political Economy has to do not only with the mere concrete, material things that enter into the science, but also with the personalities of the members of society whose activity is exercised on these concrete, material things. And from this point of view of

the subject matter of Political Economy, we formulate the definition: —

Political Economy is the science that establishes the laws of human activity with reference to the material interests of society. (Cf. Antoine, *Cours d'économie sociale*, p. 6.)

Political Economy a Science. — A science is defined as a systematic body of knowledge gained by observation, experiment, and reasoning. Now, Political Economy seeks after knowledge of wealth, of its production, distribution, and consumption.

It makes use of observation, observing the conduct of various peoples in their efforts to acquire wealth; observing the various agents, whether moral or physical, that influence the increase or decrease of wealth; observing the various factors, — land, labor, capital, exchange, social organizations, money, trade, property, — and the correlations that exist among them.

Political Economy does not deliberately experiment, but there is constant experiment going on among nations. History is filled with the experiments made in the past by the several nations in their efforts after material success.

From this observation and this experimenting, Political Economy deduces conclusions which have all the force of laws. Thus, Political Economy is a science.

But it may be said that the laws of Political Economy are not laws at all. Man and man's will endowed with the gift of freedom enter into the subject of Political Economy, and hence there can be established no fixed laws, no laws that will have any certitude, no laws on which one can hold anything certain for the future. There will always be variation and uncertainty when there is freedom of action. Here we must explain.

The laws deduced by Political Economy may be of three orders: —

1. Laws that affect man as a rational being destined to a higher life of a supernatural order; that regard the free acts of man and define the scope of their activity within the limits of the moral code. These laws will have absolute metaphysical certitude.

2. Laws that relate to the constant manner in which free agents (men) act in identical circumstances. These laws will have moral certitude. They are not possessed of the same inflexible nature as are the laws of physical science. They impose no obligation or absolute necessity. They are founded on human liberty, and may be modified according to circumstances. Still, they are true laws, moral laws, as they are called, " the expression of certain constant relations in the acts and proceedings of men." (Gide, *Principles of Political Economy*, 1900 edit., p. 11.)

3. Laws that relate to the concrete, material things that enter into the science, such as land, money, trade, credit, etc. They determine the actions and reactions of external bodies, and here the laws have physical certitude.

The laws of Political Economy may again be classified thus: (1) obligatory moral laws; (2) historical and directive moral laws; (3) physical laws.

Examples: Of the first — It is forbidden to lie or cheat in commercial transactions.

Of the second — When times are good, the cost of living low, and wages high, marriages are frequent among the working classes.

Of the third — When money is plentiful, the rate of interest is low. The rate of exchange of bills of exchange will vary with the number of bills in the market.

Political Economy is therefore a science. It is a science the province of which is to trace wealth to its causes, which lie in the activity of man as applied to the wealth-producing materials offered by nature, and to discover the laws according to which wealth is produced, consumed, and distributed.

Political Economy a Practical Science. — In view of the end that is sought to be attained, a science may be Speculative or Practical. A speculative science rests in the mere contemplation of an object; it deals in a purely abstract consideration of a subject, having no reference to the practical conduct of the individual who applies himself to it. Thus, Pure Mathematics and Metaphysics are speculative sciences.

A practical science considers principles in so far as they are rules of conduct, in so far as they determine, direct, and control the operations of rational beings. Thus, Moral Theology, Medicine, are practical sciences. Now, Political Economy considers wealth not merely in its abstract, transcendental elements, but with reference to its production, consumption, and distribution through the free activity of the members of society. Therefore, Political Economy is a practical science.

Political Economy Subject to Ethics. — Is Political Economy connected with Ethics? There are some economists who hold that Political Economy has nothing to do with Ethics. Such is the opinion of most economic writers of the old schools, of Yves Guyot, Maurice Block, Rossi, Stuart Mill, Cherbuliez, Ricardo, Bentham. Others hold that Political Economy is a special branch of Ethics. Thus, Liberatore, Devas, De Pascal, Ott. We hold that Political Economy is distinct from Ethics, but is dependent on Ethics. Thus, Pesch, Costa-Rossetti, Cathrein, Von Brants, Béchaux.

Ethics is the science that directs human actions according to the principles of right reason. Ethics embraces within its scope all the actions of man, all the activity of man, whatever may be the field in which that activity is employed. But it is clear from our definition of Political Economy that the activity of man is employed in the producing, consuming, and distributing of material goods. Political Economy, therefore, is subject to the laws of Ethics.

Can it be believed that there shall be no moral restraint upon society in the matter of the producing of wealth, that there is no restriction ethically as to the manner of using wealth, that the moral law shall not enter into the questions of property rights, social organizations, wages? Man does not lose his rational moral character by entering into society, and Political Economy cannot formulate laws with regard to wealth that antagonize the laws of Ethics. If Political Economy would justify its claim to the rank of a science, the principles it deduces must not oppose the principles deduced by another and a higher

science. Science is knowledge. Knowledge is the possession of truth. Truth cannot oppose truth. When Political Economy, therefore, attempts to lay down principles that run counter to the acknowledged principles of Ethics, it so far ceases to be a science.

Political Economy Distinct from Ethics. — Political Economy is, however, distinct from Ethics, because the subject matter of Political Economy, viz. the direction of man's activity with regard to wealth or temporal interests, differs from the subject matter of Ethics, viz. the direction of man's activity with regard to his eternal and spiritual interests.

As already stated, very many economists of the Liberal School deny the union between Political Economy and Ethics. The opinions of some of the more important may be summed up as follows: —

Yves Guyot — Political Economy is in itself unmoral. The use one makes of its laws is alone moral or immoral.

Block — Political Economy is a science, the gaining of knowledge. *Scire* (the knowing of a thing) does not come within the scope of Ethics, but *velle* (the willing of a thing) does. Ethics affects the will.

Rossi — Political Economy is a science, not an art. It pertains to the intellect, not to the will.

Stuart Mill — Political Economy has to do only with the acquisition of wealth.

Cherbuliez — Political Economy takes no account of the ethical value of its laws. Ricardo, Bentham, hold the same.

In refutation of the above opinions, it may be here briefly stated that Political Economy is not a speculative science. It is a practical science, which stands midway between speculative science and art. Political Economy cannot eliminate or abstract from the morality of man's actions, whatever be the sphere of man's activity. Every volitional act of man is imputable to man, is deserving of either praise or blame, and comes within the domain of morality.

A reaction has set in among modern economists, and many ad-

mit a connection between the two sciences. Thus, Cauwès, Gide, Baudrillart, De Laveleye, Béchaux, Minghetti, Schönberg. Leroy Beaulieu declares that "l'économie politique fait bon ménage[1] avec la morale." (*Traité d'économie politique*, I, p. 78.)

Political Economy Subordinate to Political Science. — Is Political Economy connected with Social or Political Science? The end of Social or Political Science is to procure the common temporal good of the citizens. It has many branches: Law, Politics, Statecraft, Education. Political Economy also comes within its range, since it studies the wealth of the members of society, a part of the temporal good. It is subordinate, therefore, to Political Science, and in case of conflict between its principles and those of Political Science, Political Economy, which seeks but a part of the temporal good, must yield to that science which seeks the whole temporal good of society.

II. Method of Political Economy

Subject Matter of Political Economy. — The method employed by Political Economy in seeking after knowledge will depend on its subject matter. The subject matter of Political Economy consists of the relations of men among themselves and of the relations of men with the external world in their pursuit of material goods. Hence, its subject matter is threefold: —

1. Man as a social being, bound by the moral law and destined to eternal life in the supernatural order;
2. The external world governed by physical laws;
3. Human activity, or the relations between man and the material things upon which he exercises his activity.

Method of Political Economy. — The subject matter of Political Economy, therefore, is partly speculative and partly practical. Such being the case, the method employed by Political Economy cannot be purely inductive — from facts and experiments to conclusion — or purely deductive — from premises to

[1] An expression usually applied to a husband and wife who live happily together. "Political Economy lives happily with Ethics."

conclusion. It makes use of speculative reasons and of the data of experience. It bases its conclusions on the nature and the duties of man, as also on an investigation of nature, labor, capital, exchange, the consumption and distribution of wealth.

Under deduction, Political Economy (1) takes cognizance of the moral laws — set forth in Ethics — which direct man to his ultimate end, in so far as they bear relation to economics; (2) determines the general means to be employed in the production, the consumption, and the distribution of wealth; (3) determines the practical employment of human activity in conformity with the first and second functions.

Under induction, Political Economy takes up (1) the study of facts as confirmatory of the general principles of human activity; (2) the teachings of history; (3) the study of facts as determining in special cases the application of general principles.

For the Catholic economist the sources of the ethical principles that enter into Political Economy are (1) dogmatic truths; (2) the teachings of the Church, *e.g.* the Encyclicals of Leo XIII, (3) the Natural Law and its applications as made by Moral Theology.

III. Schools of Political Economy

The Mercantile System. — Before entering upon the enumeration of the various schools of Political Economy, it will be well to make mention of the system which held sway almost universally before the rise of the Liberal School in 1765. That system is known as the Mercantile System.

It held that wealth consisted exclusively of money. The more actual money a country had, the more wealth it had. The main purpose of the state was to increase the store of money, and the chief means of increasing this store was commerce. Hence, commerce was to be encouraged. The export trade should surpass the import trade, and the amount of the surplus of the former over the latter would indicate the gain in specie or coin.

Thus, if goods produced within a country be sold within the country, the money remains within the country, but there is no

increase in wealth; if, on the contrary, the goods be sold abroad and cash be received for them, there is an increase in specie.

Imports show an outgoing of coin, for we must pay money for the foreign goods we receive, and the money thus goes abroad. If imports equal exports, there is no gain. The state, therefore, according to the Mercantile System, should encourage export trade by any means possible. It might do so by bounties; *e.g.* if a firm produces for export trade $100,000 of goods, then for every $10,000 more it exports, the government might pay it $1000 bounty. The state should discourage import trade by duties, except where the import trade would bring in raw material which would be manufactured at home into the finished product and exported again under the new form. The " balance of trade " was to be secured for the country. The balance of trade is in favor of a country when the exports exceed the imports.

Colbert, minister of Louis XIV, carried out the principles of the Mercantile System in France, and it prevailed in England during the sixteenth, seventeenth, and much of the eighteenth centuries.

The system is discredited to-day, because some of the fundamental principles of the system are either not accepted at all or are accepted in a very modified form. Thus, the importance of specie is changed through the introduction of instruments of credit. Gold is recognized as a medium of exchange rather than as an object that is to be sought after and stored away. The balance of trade is not to-day the sole indication of the prosperity of a country. There are other items that balance accounts between nations besides their exports and imports. (Cf. p. 239.)

The chief modern schools of Political Economy are four: the Liberal, the Socialist, the Catholic, the Historical.

The Liberal School; Tenets. — The Liberal School has for its motto " Liberty." It demands absolute individual liberty in economics, and abstention of the state from all interference not absolutely necessary in the affairs of the individual. Liberty, it says, is the great, the only, source of progress, of harmony,

and of social peace. In further detail, the tenets of the Liberal School are as follows: —

There must be freedom for the laborer to determine for himself the nature, the duration, and the place of his labor, to make whatever kind of labor contract he may find most advantageous to himself.

Through this freedom of labor there will result a natural distribution of the labor forces among the different trades and businesses, a just equilibrium between the factors supply and demand, the greatest amount of diligence and energy on the part of labor, and finally the greatest possible productivity of all the different labor forces.

There must be freedom for the landowner to use his land as he pleases, to dispose of it as may suit his own profit or convenience, by sale, mortgage, division, bequest, or gift, to dispose of the product of his land so as to derive the greatest possible returns.

There must be freedom for the capitalist in matters of loans, capitalist associations, the formation of stock companies and trusts, the undertaking of new industries, the employment of labor, the amount of wages paid, and the duration of labor hours.

The rate of the wages of the laborer is to be determined by the law of supply and demand. Labor is a commodity and its price is to be fixed, according to the Liberal School, by the same laws that regulate the prices of every other exchangeable product. No ethical or humane considerations should enter into the labor contract formed between employer and laborer.

Self-interest is the fundamental motive of all men's actions, and if unrestrained will infallibly lead men to act for the common good.

The present state of society, with its laws, institutions, capitalists, laborers, and wage system, is the outgrowth of nature. The world is the best possible. The present conditions are the best not only relatively but absolutely. If all the various forces of production, consumption, distribution are left to themselves, they will ultimately and infallibly work out the perfection of the individual and the community, by virtue of inherent and

necessary laws by which their energies and the relations that subsist between them are determined.

To give full play to this absolute liberty demanded by the Liberal School, the government must not interfere in matters economic except when liberty itself is menaced. Hence the famous saying: *Laissez faire, laissez passer*,[1] which has become the shibboleth of the Liberals.

To the principle of freedom of the individual is added the principle of free competition. Competition must be allowed full sway among individuals and corporations, in home and foreign trade. This latter principle, it is claimed, will bring about the highest degree of perfection in all kinds of industries. It is a providential law of harmony. It will be productive of a supply of commodities suited to the demand, of the best kinds of commodities, of low prices.

The Liberal School is conservative, argumentative, aprioristic, metaphysical, deductive. From general principles, it arrives at conclusions which are supposed to have the force of immutable laws.

The followers of the Liberal School are, in England, Smith, Ricardo, Malthus, Senior, Stuart Mill; in France, J. B. Say, Bastiat, Cournot, J. Garnier.

Branches of the Liberal School. — There are several periods in the development of the Liberal School, and in each period are found branches of the school, broadly similar but differing in details.

(1) *Physiocrats.* — The first branch embraces the Physiocrats. These are the disciples of Quesnay, physician of Louis XIV, who date their existence from 1765.

The principles of the Physiocrats are the outgrowth of the philosophy of the time. Rousseau had inaugurated a new code of ethics by the announcement that man, essentially good, has but to follow out the tendencies of his nature in order to reach perfection. Voltaire (d. 1778) and the Encyclopedists (1751–

[1] "Let make (or do), let pass," that is, Let people work as they like, and let people and goods pass freely from one place to another, without government interference.

1780) had propagated their infidel doctrines, by which man was exalted and the state belittled — doctrines that were influential in bringing about the French Revolution.

The principles of the Physiocrats more immediately affecting economics are as follows: —

1. Agriculture alone is the source of the production of wealth. (Hence the Physiocrats are sometimes called the Agricultural School.)

2. Gold is a means of trade, not an end to be sought after.

3. A nation cannot in the long run sell more than it buys, nor would it be benefited if it did.

4. All government privileges and monopolies relating to business and commerce are wrong.

5. Trade, domestic and foreign, should be entirely free.

6. Government interference in matters of trade is to be tolerated only when necessary to protect individual liberty.

7. Taxes should be levied directly on land.

(2) *Adam Smith and his Followers.* — The second branch of the Liberal School was founded in 1776 by Adam Smith, and it embraces many of the French economic writers. Smith differs in many points from the Physiocrats. He does not touch on the science of Sociology, but limits his discussion to the production of wealth.

Like the Physiocrats, Smith holds that self-interest is the fundamental principle which directs men in their economic relations. His main principles are as follows: —

1. Industry is the source of wealth. (Hence Smith and his followers are sometimes called the Industrial School.)

2. Labor is the source of value and the determinant of price.

3. Trade should be free.

4. State interference should be reduced to a minimum.

Malthus and Ricardo are followers of Smith. It was Ricardo especially who propagated the doctrines of Smith in England.

The Liberal School triumphed in England in 1846, when, under Richard Cobden and John Bright, with the support of Robert Peel, it obtained free trade.

(3) *French School.* — The third branch of the Liberal School is the French. Its principal exponents are J. B. Say, Rossi, Cherbuliez, Bastiat. They all hold the fundamental "laissez faire" doctrine of the school and deprecate state interference.

(4) *Manchester School.* — Several other less important branches of the Liberal School exist under various denominations; for example, the Manchester School, which, in so far as it touches on economic subjects, supports the principles of the Liberal School. Since 1820, it has strongly advocated the principle of free trade and has been opposed to the principle of protection. This school, however, does not confine itself exclusively to merely economic subjects. It deals in broader matters that come under Political Science.

(5) *Moderate Liberal School.* — The Moderate Liberal School, like its parent, is optimistic and claims that man's nature, if left to itself, will dissipate all ills and attain to the perfection that lies within the compass of the human race. It advocates, however, a partial abandonment of the strict "laissez faire" principles of the older Classical School of Liberals. It permits a partial state intervention, and modifies the free trade principle so as to tolerate a certain amount of protection where protection is the only remedy for certain evils of free trade. It allows a broader scope to the study of facts which are admitted to have an influence on the trend of economic progress. This branch is gradually replacing the old Liberal School.

(6) *Eclectic School.* — The Eclectic School, which has arisen lately and has for exponents Cauwès and Gide, allows state intervention.

(7) *Austrian School.* — The Austrian School originated in the writings of several Austrian economists, Menger, Wieser, Sax, Boehm-Bawerk. It is really a branch of the Liberal School. It follows the deductive method of the older school, but differs from it in some important conclusions. It lays great stress on the marginal theory of value (p. 42). "Utility, the pleasure or satisfaction derived from consumption, is the ultimate cause and measure of value." (Ely, *Outlines of Economics*, 1908, p.

674.) It has been called the psychological school, because it seeks the causes of things in the subjective disposition of men. It has exerted a certain influence on economic thought.

(8) *Mathematical School.* — The Mathematical School, which deals largely in statistics, is still another branch. Supply and demand, value, wealth, and all the various factors that enter into economics, are submitted to statistics, and the law of probabilities is derived and held to be absolute. This method is practiced in France by Cournot, in England by Edgeworth, Wicksteed, Walras, Jevons, and Marshall, and in the United States by Irving Fisher.

The Socialist School; Explanation and Definition. — The Socialist School is radically opposed to the Liberal School.

Society as it exists to-day is not, according to the Socialists, a natural product, the effect of the working out of forces intrinsic to things, but rather the result of injustice and spoliation.

They say that the sources of the many evils now existing in society are individualism, free competition, and the right of private property. The principle " everybody for self " works to the detriment of all. An individual may begin on an equality with his fellows, but soon, through injustice, fraud, a greater degree of unscrupulousness, through advantages secured by force, chicanery, or conditions wholly social and independent of all personal effort, may secure an immense amount of wealth, set himself apart from his fellow men, and destroy the equality which is the natural right of all. Classes are thus formed, the property owner, the wealthy capitalist on the one hand, and on the other hand the laborer who owns nothing but his labor capacity.

Under the régime of individualism advocated by the Liberal School, there has arisen an ever-widening division between the capitalistic and the laboring classes, the rich and the poor. It is claimed that the rich are becoming richer and the poor poorer. The great army of the unemployed is growing larger. The difficulty of making a living has gradually increased, though the sum of the wealth of the world has been multiplied a hundredfold

since the beginning of the great development of industry due to the introduction of machinery and the employment of labor-saving inventions in industrial processes.

To bring about amelioration in the condition of the proletariat, to do away with the slavery of the wage system, to raise the laborer to a plane of freedom and of equality with the envied capitalist, is the proposed purpose of modern Socialism.

That there exists a natural tendency towards a change in society, towards a communistic ownership of all property, is, in the opinion of Socialists, evidenced by the gradual concentration of all industries, the small or medium industries becoming absorbed in the giant industrial combinations. It is seen also, they declare, in the extensive growth of trusts and great corporations that are destroying the individual independent artisan class; in the increasing application of machinery to all kinds of labor, whereby the manual worker is driven out of the field and made more and more dependent on the capitalists; in the rapid spread of municipal ownership of public utilities, — all of which are but the forerunners of Socialism, the intermediary steps that will lead ultimately to the introduction of a universal commune.

Socialism is principally an economic system; secondarily and subordinately it is a political system, which treats of society in general, the state, the family, and other topics of Sociology. (Cathrein-Gettelmann, *Socialism*, 1904, p. 18.)

Socialism has made headway in Europe. The Socialists have entered into politics, and have been able to form strong political parties that seek through legislative means to obtain their aims in the several states. In Russia, during the World War, the ultra-radicals were successful in overturning the government and in setting up a Socialist Republic, in which the principles of Socialism were fully carried out. In the United States, the Socialists have formed political organizations under various denominations: Socialist Party, Socialist Labor Party, American Labor Party, Communist Labor Party, Industrial Workers of the World. A most active propagandism is being carried on by

Socialist teachers on the platform and through the press, and strenuous efforts are made to bring the mass of the laboring classes within the fold of Socialism.

Socialism or "social democracy may be defined as that system of Political Economy which advocates the inalienable ownership on the part of the state of all capital or materials of labor, as also the public administration of all economic goods and the distribution of all produce by the democratic state." (Cathrein-Gettelmann, *Socialism*, 1904, p. 17.)

According to the definition, the state is to become the sole possessor of capital, land, mines, factories, raw materials, implements, and machinery. It is to become the owner of all means of transportation and communication and all other public utilities, and to administer all the mechanism of exchange. It is to become the distributor of all the produce which results from the various factors of production. (*Ib.*, p. 92 et al.)

Principles of Socialism. — The general principles of Socialism may be put in more detailed form as follows: —

1. The right of individual and private property in the various means of production shall cease. To-day, in the progress of industrial methods, all the means of production, land, capital, machinery, implements, have come into the possession of the capitalist. The great mass of the laborers possess nothing but their labor, which is useless without the means of production. This right of property is the inherent evil of present conditions in society and must be done away with before there can be any betterment of the working class.

2. The state shall be constituted in the form of a democracy. Any other form of government (monarchy, *e.g.*) would be incompatible with the perfect leveling of all classes and the conditions of equality demanded by the principles of Socialism.

3. The state shall own all capital, land, mines, factories, raw materials, implements, machinery; all means of transportation (railroads, express companies, and the like), and of communication (telegraph, telephone); all public utilities (water works, gas and electric lighting plants, street railways, and so on).

4. Production shall be regulated by the state. All the citizens shall be obliged to work. (Cathrein-Gettelmann, *Socialism*, p. 201.) They will, however, have arrived through education at such a degree of human perfection, that work will be looked upon as a pleasure and will be accepted willingly.

There will be national workshops, and committees will determine the nature of the work and the amount to be done. There will be no overproduction. Just enough will be produced to satisfy the needs of the citizens.

5. The mechanism of exchange shall be regulated and carried on by the state. There will be public stores where the products of labor may be disposed of by the laborers, in exchange for bonds the value of which will be stated in hours of labor.

6. Labor is the sole standard of value. A commodity has exchange value only on account of the human labor expended on it, and the measure of labor embodied in the commodity determines also its relative value in exchange. (*Ib.*, p. 46.)

7. There will be no metal money. It shall be replaced by labor coupons, which will represent different amounts of labor hours, and which can be exchanged by the holders for commodities containing in their production an equal amount of hours of labor.

8. Consumption of goods shall be free with regard to objects of ordinary use. Wills shall be allowed only in the matter of personal goods. Implements of labor shall return to the state.

9. The distribution of all the produce of labor shall be in the hands of the state. This distribution shall be apportioned according to the work done or the services rendered and according to the needs of the individual citizens. (See under Distribution, p. 387.)

(For the origin and growth of Socialism, the fundamental principles on which it rests, and its dictates relative to the family, education, religion, and other details more particularly pertaining to social organization, we must refer to the extensive literature on Socialism.)

Defenders of Socialism. — The principal propagators of

Socialism are: in Germany — Rodbertus, Ferdinand Lassalle, F. Engels, Karl Marx, Bebel, Liebknecht; in France — Cabet, Babeuf, Count Henri de Saint-Simon, Fourier, Proudhon, Bazard, Louis Blanc; in England — Robert Owen, Wm. Morris, Wm. Thompson;, in Belgium — Colins, De Paepe, Vandervelde.

The chief founder of modern Socialism is Karl Marx (1818–1883). In his books *Criticism of Political Economy* (1859) and *Capital* (1867), he lays down the principles which have become the foundation of modern Socialism, and have generally been accepted by the great mass of Socialists in all countries.

Branches of Socialism. — Besides the Socialist School just described, there are several other branches of Socialists or near-Socialists, who adopt principles differing materially from those of the Marxian Socialists.

(1) *Agrarian Socialists.* — Agrarian Socialists, followers of Henry George (d. 1897), hold: —

1. That all the land should belong to the community. The government should receive the economic rent from land.

2. That tax on land should replace all other taxes. This is the doctrine of the " single tax." All other government taxes, with all their attendant evils, multiplicity, cost of collection, inequality, and injustice, would be abolished. Henry George protests that the " single tax " is not a tax on land, but on the value of land. All lands may be conceived as having a fundamental value. An added accidental value may accrue to certain parcels of land, owing to various causes over which the landowner has no control. Such causes are increase of population, of exchanges, scientific discoveries and inventions, social education, the general advancement of society. These causes bring about an " unearned increment " in the value of land. This " unearned increment " should be the property of society, since it is wholly the result of social conditions. The means by which to effect this state appropriation of the " unearned increment," and indeed of all " rent," is taxation. (*Progress and Poverty*, Bk. VIII, ch. 2.)

3. That the owner of land should be entitled only to whatever his labor and capital can produce from the land.

The principles advocated by George would lead to Socialism pure and simple. They postulate the cessation of the private right of property in land. According to this school, individual property right in land is an injustice. Land must become nationalized. "This is the remedy for the unjust and unequal distribution of wealth . . . and for all the evils which flow from it: we must make land common property." (*Progress and Poverty*, Bk. VI, ch. 2.)

Labor, according to George, is the only legitimate title to private property. (*Ib.*, Bk. VII, ch. 1.)

Rent, to which, as will be seen later (p. 394), the landowner has a just right, would be confiscated without compensation by the state. "Rent is a robbery." "Rent, the creation of the whole community, necessarily belongs to the whole community." (*Ib.* Bk. VII, ch. 3; Bk. VIII, ch. 2. Cf. H. Pesch, S.J., *Lehrbuch der Nationalökonomie*, I, p. 189.)

(2) *State Socialists.* — "State Socialism," says M. de Mun, "is a social conception in which the state, the central power, possesses and administers directly all the great financial and industrial enterprises of the country, directs all its social institutions, becomes the holder of all the resources of the nation, and in turn itself provides for all the moral and material needs of the citizens, becoming thus the universal treasurer and banker, the general agent of transportation and commerce, the exclusive distributor of labor, of wealth, of means of education, of employments and of aid, — in a word, the promoter and the regulator of all natural activity." (In Antoine, *Cours d'économie sociale*, p. 216.)

State Socialists believe indeed in private property, but with them the right of private property is a creation of the state, not a natural right. What the state has given the state can take away. The capitalist owner is but a public steward and may be removed at the will of the state.

The defenders of State Socialism would take a course midway

between Socialism and Individualism. They hold that the state is able by its laws to bring adequate relief to all the evil conditions that exist in society. They would leave out religion from every effort to alleviate the sufferings of the masses.

State Socialism errs in denying the natural right of private property, and in claiming that it is but a concession of the state. "The individual and the family with their essential rights are older than the state, and among these rights is that of private property." (Cathrein, *Kirchen Lexicon*, "Sociale Frage," p. 442.)

It errs, moreover, in believing that the state alone can cure the ills of society. It can do much, but its efforts will prove abortive unless it has the concurrent aid of the Church in instilling the principles of Religion into the minds of men.

(3) *Evangelical Socialists.* — The Evangelical or Christian Socialists would seek the reform of society through the spread of the Gospel and the influence of Christian teaching. They would engage the coöperation of all religions.

(4) *Anarchists.* — Anarchism, like Socialism, seeks the abolition of the present order of things. It would replace the existing social system by absolute liberty and equality. When all authority and class distinctions and property rights have been destroyed, they maintain, men will live together in peaceful amity and perfect accord. (Cf. Cathrein-Gettelmann, *Socialism*, p. 14.)

The principal exponents of Anarchism are Bakunin (d. 1876), Prince Krapotkin, Eliseus Reclus, John Most, John Mackay.

The professed ultimate object of Anarchism is the well-being of all, perfect equality, the reign of pure reason and liberty.

The immediate objects are the destruction of individual property rights, the spoliation of capitalists, the burning of all title deeds, the abolition of authority, the replacing of actual society by a federation of groups.

The means advocated by the more radical anarchists are dynamite, the dagger, the bomb.

(5) *Syndicalists.* — Syndicalism, especially of the radical type,

seeks the destruction of all present forms of government and social organizations, the abolition of private property, and the dominance of the working classes over all the other classes of society. It proposes to accomplish its end by the formation of closed unions of the different trades, and the employment of the strike and of violence against the ruling orders, thus precipitating a social revolution, out of which will emerge a social condition in which men will live associated in small federated groups.

(6) *Bolshevists.* — Bolshevism stands for the overthrow of existing forms of government, the elimination of the upper classes, and the establishment of the supreme rule of the working classes. Private property is abolished. Land and all productive agencies are nationalized. The people are divided into communistic groups or soviets. The soviet through its elected officers rules in its district. National government is administered by a congress of all the soviets, and a Central Executive Committee. The principles and the actual operations of the Bolshevists can be studied in the Russian Socialist Federated Soviet Republic which began in 1918.

(7) *Industrial Workers of the World.* — The aim of this organization is to unite all the laboring class into an industrial union that will replace the present system. "One big union" is to be formed, and when solidly established, a universal strike is to disrupt society and bring it under the control of the workers.

The Catholic School; Representatives. — The representatives of the Catholic School and the exponents of its doctrines are to be found in every country of the world. Prominent members of the Catholic hierarchy in every land have by word and act sought to stem the tide of irreligion and materialism that sweeps over the world and tends to pervert the principles of action in economic and social matters. In many European countries Catholics have formed political parties that seek by their influence in legislative assemblies to safeguard the fundamental principles.

In the United States, conditions are not the same as in European countries. Here religious toleration exists and practical equality obtains among all denominations. Hence there have

not been the incentives to induce Catholics to unite in any specially concerted action. Still the influence of Catholic teaching is spread in the pulpit through the preaching of the Catholic hierarchy and priesthood, in the press through the many Catholic magazines and newspapers, in society in general through the increase of Catholic societies.

The Catholic School has grown considerably during the past fifty years, especially in Europe. The movement was started in Germany by Bishop von Ketteler, of Mainz, through his many writings, and especially his book *Die Arbeiterfrage und das Christenthum* (1864). In France the most ardent propagator of the school is Count de Mun, whose writings and speeches have done much to spread the movement. The Encyclical *Rerum Novarum*, of Leo XIII, since its publication in 1891, has become the main source of the principles of the Catholic School.

Position of the Catholic School. — The Catholic School deals broadly with the whole social question, and does not limit its investigation to merely economic subjects. The latter are so intimately interwoven with the general principles of the school, that it is almost impossible to confine one's self strictly to purely economic matters without entering in some detail into a review of the broader subject of social science as understood in the Catholic policy. We may be pardoned, therefore, for the detail with which the subject is treated.

Cause of Social Evils. — The evil under which society is at present suffering is a religious and a moral evil.

The source of the social unrest is not to be found in the actual condition of the laboring class as compared with past times. The general condition of the working class is better to-day than it has ever been in previous times, a fact admitted by many economic writers and substantiated by statistics.

A cause of disquiet does lie in the fact that in recent times the development of distribution has not kept pace with production. Production has increased immensely owing to the introduction of machinery and the application of modern methods in all industrial concerns. The capitalist is enabled to reap immense

returns, while the wage earner has not been proportionately bettered by the advance of capitalistic production. The individual is driven out by the gigantic corporations that seek to absorb all smaller independent businesses. He cannot compete with the opulent trusts and combinations and is forced to accept and conform to the prices set by them, with the almost certain result that he will be obliged to close his business.

Machine work has in many industries taken the place of manual work; the machine drives out the smaller artisan, and the latter is forced to give up his freedom and independence and to depend for his subsistence on the wage offered by the capitalist.

The laborer received a lesser wage in former times, but he was sure of his wage. In more recent times, the laborer is not always certain of his living. He cannot count on the certainty of his weekly wage. Overproduction will cause his hours of work and remuneration to be curtailed; the invention of a new machine may throw him out of work; he may have to change his domicile to seek work in more favorable localities.

Such are some of the reasons for the unrest existing to-day in society. They are economic reasons. But there are also reasons of a spiritual nature.

Selfishness has developed greatly among the members of society. The doctrines of the Liberal School, the principles of individualism and free untrammeled competition, have for long held implicit sway in the world, and the result has been to generate a struggle for existence in which each one seeks his own welfare at the expense of his neighbor if necessary, or at least with a total disregard for the interests of others, and looks with displeasure upon conditions that enable others to surpass him.

To this may be added the desire to rise above a condition of ease and comfort, and the ambition to acquire wealth, in order to share in the life of luxury of which so many examples are given by the very wealthy.

These are some of the causes which arouse a spirit of unrest

among the laboring classes, and bring about antagonism between the capitalists and the proletariat.

Liberal School Rejected. — The Catholic School holds that the solution of the social question cannot be found by following out the principles of the schools already mentioned, the Liberal and the Socialist schools.

It rejects the " laissez faire " principle of the Liberal School, and insists that to the state belongs the duty of procuring the temporal well-being of society. The Liberal School errs in insisting almost exclusively on the rights of the individual. Man is also a social being, and his social relations must form part of the concern of the state.

The free and unrestrained competition so strongly advocated by the Liberal School has introduced many evils into society. Large industries are able to destroy the smaller through the competitive power they have resulting from their possession of immense capital. Through competition capital has become the master in the world of production, and society has become divided into two antagonistic classes, the wealthy capitalists and the poor wage earners. To prevent the abuses resulting from unrestricted competition, the state should exercise its power through wise regulation and supervision. The freedom of the weaker elements of society should be safeguarded against the rapacity and the unjust measures of the stronger.

Socialism Rejected. — The Catholic School rejects Socialism, because: —

1. Socialism falsely bases its system on the equality of rights of all men, and is utopian in aiming at a condition of perfect equality and fraternity. Men are not equal in the concrete, in physical and mental endowments, in the possession of qualities that make for success in the competitive struggle for existence. Human nature will never become the ideally perfect thing the Socialists conceive. (See under Distribution, p. 385.)

2. Socialism would subject the laborer to greater slavery than Socialists claim now to exist, since he will depend for his labor and place of work on the will of the community.

3. Socialism would do away with the rights of the individual and make him merely a unit in the great social fabric.

4. It rejects the natural right of private property in the means of production.

5. It falsely claims that labor alone is the source of all value. (See under Value, p. 40.)

6. It falsely holds the theory of the Iron Law of wages. (See under Wages, p. 451.)

7. It unduly exaggerates the importance of industrial life or the production of wealth. (Cf. Cathrein-Gettelmann, *Socialism*, p. 201.)

8. It is hostile to religion.

9. It destroys the sanctity and the indissolubility of marriage, and would efface the family.

Principles of the Catholic School. — The fundamental principles of the Catholic School may be outlined as follows (cf. Cathrein, *Kirchen Lexicon*, " Sociale Frage," p. 445) : —

Human society is ordained by God. The Church, the state, and the family are institutions divinely ordained, each with its own particular aim and sphere of activity, each with its own peculiar rights and duties, each with its relations to the others, and all destined to work unitedly and harmoniously towards a common purpose. All these institutions tend to help man to attain his end, and that end is to serve God in this life and thereby reach eternal happiness in the next. This earth is not man's lasting dwelling place. It is but a place of trial and pilgrimage, where sorrow always will abide and the heart of man can never attain perfect happiness.

While every effort should be made to better social conditions, society in its existing form should not be overturned, and strenuous warfare should be carried on against the Socialist doctrine that would subvert the present order of society.

Insistence is laid on the following points : —

1. The sacredness and indissolubility of marriage.

2. The right of the parents to educate the child.

3. The right of private property in the means of production,

without excluding the right of property in the state or corporations.

4. The right of private individual productive energy and enterprise, contrary to the claim of Socialists and State Socialists, who would give such right to the state alone. The individual and the family are older than the state.

5. The right of individuals to unite for the safeguarding of their liberty and their rights.

6. The toleration of the differences of classes in society, though the bitter opposition existing at present between them should be reprobated. Not absolute equality of all classes is sought, but a condition wherein there should exist respect and charity among all the members of the different classes. The perfect equality desired by the Socialists is in opposition to human nature, to Christian revelation, and to the real welfare of society.

Nor is the democratic state advocated by Socialists to be sought for; whatever form of government obtains rightfully in the state, be it monarchy or democracy, is to be accepted.

7. Rejection of the "laissez faire" principle of the Liberal School. By legislative and executive means, the state must seek to remedy the evils of society. "The state is established to provide for the well-being of society, and society is formed in great measure of the working class. To this class, therefore, the state must direct its most vigilant solicitude under pain of neglecting its duty. It is said that the duty of the state is to cause justice to be observed; but that is not all its duty; it must, moreover, in order to fulfill all its obligations, seek out the social welfare, which does not depend exclusively on justice, but also on a mass of other elements, the most of them depending on labor. Consequently, it must intervene in the protection of labor, so as to enable labor to participate in public prosperity and safety." (*Civilta Cattolica;* in Antoine, *Cours d'économie sociale*, p. 236.)

Liberatore says: "A certain amount of state intervention in the economic affairs of society is indispensable. Leaving them

at the mercy of selfishness in conflict is applying to industry the Darwinian idea of the struggle for existence, in which the strongest has the best of it by survival of the fittest. The duty of the government in this matter is to protect the weak and direct the strong." (*Political Economy*, p. 273.)

8. But the state cannot do all. The Church must join with the state. The moral evils that burden society can be overcome only through the influence of Christianity, and this influence will be exerted through the divinely appointed institution — the Church.

9. Activity on the part of laborers and small tradesmen for their own preservation and betterment. They must become active. Church and state can do little without this autonomic coöperation of the people themselves.

Trade unions and labor unions should be formed for the protection of the smaller traders and the wage earners.

Such are the broad principles of the Catholic School. They may all be embraced under the three heads: (1) State legislation, wise, moderate, and progressive; (2) The action and influence of the Church and Christian charity; (3) Individual and associated initiative.

Activity of the State. — The activity of the state should be exerted in obtaining the following reforms: —

1. The safeguarding of the family and the preservation of the home life of the laborers. A man has a right to an orderly, Christian family life. At present such a life is scarcely possible to the average wage earner. Unlimited competition leads to an effort after production at the cheapest possible cost. Hence, the labor of women and children is employed, to the detriment of the home life. Wives and mothers who are forced to spend the day in factory work in order to add to the scant wages earned by the head of the family, are prevented from making the home attractive. They are obliged to give over the care of young children to the charity of neighbors or of nurseries; they can exert no beneficent influence on the early education of their children, while the children who go out to work are deprived of

any but the merest rudiments of education, and are exposed to all the evils, physical and moral, of factory life.

2. Decent and sanitary conditions in the dwellings of the working class.

3. Prohibition of night work except when necessary.

4. Prohibition of labor on Sunday.

5. The encouragement of union between capital and labor.

6. Restriction in the formation of trusts.

7. Laws favoring labor unions, unions between capitalists and workmen, employment bureaus.

8. The establishment of a minimum wage suitable for the sustenance of an honest and diligent workman, and the fixing of the normal fee in each profession.

9. The fixing of the extreme greatest limit of a day's work for all laborers, and especially for the work of children under 18 years of age.

10. Prohibition of the labor of women in mines, and of the night work done by women and by children under 18 years of age.

11. Prohibition of child labor in factories for children under 14 years of age.

12. Enforcement of sanitary conditions in the workshops.

13. The greatest possible elimination of danger from machinery, by causing all machinery to be guarded against the carelessness of employees.

14. Insurance of the laborer against the loss of life, accident, sickness, forced unemployment.

Activity of the Church. — The activity of the Church is shown by teaching the truths of Christianity to all classes. The state can affect only the external conditions of men. There must be an inner change, a change in the mental conception of the fundamental truths on which social life is based, and which should determine the actions of men in their relations to God, to themselves, and to their neighbors. This can be done by the Church alone, and it can be done only by the spread of the truths of the Gospel.

Hence the Church must have perfect freedom to carry out its task of instructing the people.

Through the teaching of the Church, men will learn to lift their gaze to a higher life and to realize that their whole life purpose should not be limited to the acquisition of wealth, that there are loftier aims of a spiritual nature more befitting the activity of their spiritual faculties.

Men will conceive the right idea of this present life as a time of trial, where happiness here and hereafter can be attained by serving God and obeying His law.

The rich and the poor will be brought to realize that they are not opponents, but are united by a common bond, having the same Creator and the same end, with mutual rights and duties.

The laborers should put aside all envy of the rich and should fulfill their contracts with the rich and bear with patience and resignation the hardships of their life. Poverty and manual labor are not degrading, since the Son of God became poor and earned His livelihood through the work of His hands.

On the other hand, the rich should look upon the laborer not as a mere tool whose labor they may bargain for, but as a fellow being endowed with a personality and possessed of inalienable rights. They should pay the laborer a just wage, should not overburden him with work, nor expose him to danger of life and limb, but should treat him with respect and kindness, since he too is a child of God and an heir to Heaven.

The Church teaches not only the duties of justice, but insists on the practice of charity. All men are members of the same God's family. The rich are the custodians, the stewards of the wealth they possess. It should in some way be shared with the poor. They can give of their superabundance. The greater the need of the poor, the greater the duty of the rich.

The Church is not merely a teacher. It is moreover the dispenser of God's grace through the sacraments. Herein it offers to men a powerful means of strength to aid the weakness of human nature in tending towards the lofty ideals which it lays before them in its teaching.

The Historical School; Explanation. — The Historical School of Political Economy is a reaction against the Classical School, and began with the publication of Wm. Roscher's work on Political Economy in 1843 (*Grundriss zu Vorlesungen über die Staatswirtschaft nach geschichtlicher Methode*). With Roscher should be associated Lorenz von Stein, Bruno Hildebrand, Karl Knies, Kauts, Cliffe-Leslie, De Laveleye.

The Historical School rejects the deductive, aprioristic method of the Liberal School, and turns to history for the study of social and economic facts.

Instead of assuming principles arrived at through the deductive method and insisting that facts must necessarily conform to such principles, the school studies economic facts in their relation to their surroundings and as influenced by the conditions of governments, laws, external and internal forces, as manifested in the past history of peoples.

The Historical School holds that there are no universal and absolute principles, no general body of laws, which determine the mode of action of the various economic events. Each particular circumstance of time must be studied, they say, and the trend of events will indicate a certain conclusion which, however, is not a law in the strict sense, but an historical declaration of how things happen. Things do not happen by any logical sequence, but because of circumstances peculiar to each case, changeable as the circumstances may change.

According to the Historical School, there is a continual evolution going on in economic matters as there is in all society. The direction which the evolutionary process will take depends on environment, internal and external, which imperceptibly exerts its influence on men and things.

The Historical School follows the general tendency of scientific investigation in the preceding century, in decrying the metaphysical methods of argumentation and turning more to the observation of concrete facts. Its method is purely descriptive and tends to destroy Political Economy as a science.

Principles of the Historical School. — Its principles, more

particularly relating to Political Economy, may be thus formulated: —

1. Greater insistence should be put on the study of historical facts relative to wealth, its production, consumption, and distribution, than upon the abstractions, hypotheses, and a priori deductions so much used by the Liberal School.

2. These historical facts present merely passing phases of an ever advancing and ever changing development.

3. The so-called laws of Political Economy are but the generalizations of facts as noticed in the past, and furnish no certainty of what will take place in the present or the future.

4. Property ownership and wages are not the outgrowth of any general or necessary causes, but "historical categories," as they are called.

5. The principle of "laissez faire" should be rejected.

6. The state must aid in bringing about economic prosperity by wise laws.

QUESTIONS

1. What forms the basis of the definition of Political Economy? Why is the activity of man brought into the definition?
2. What is a science? Show that Political Economy comes within the definition of a science.
3. Illustrate by concrete examples how Political Economy makes use of observation. What does Political Economy observe?
4. What is the nature of the experimenting made use of by Political Economy?
5. What is a law? What kinds of laws does Political Economy formulate? Does Political Economy accept any laws from any other source? Give concrete examples of the several kinds of laws that are found in Political Economy.
6. What is a practical science? a speculative science? Give examples of each kind. Why is Political Economy a practical science?
7. What is Ethics? Show how Political Economy is distinct from Ethics but subject to it. Give examples to illustrate. Does popular opinion to-day admit a connection between Ethics and Political Economy?
8. What is Political Science? Give examples to show that Political Economy is subordinate to Political Science.

9. What is induction? deduction? Explain the method of Political Economy. Give examples. Show how the sources of ethical principles are made use of in the discussion of some economic subject.
10. Explain the Mercantile System.
11. What are the fundamental principles of the Liberal School? Does the Liberal School favor the deductive or the inductive method in arriving at its conclusions? Explain the meaning of these terms by examples.
12. Mention the different branches of the Liberal School. Read up the historical account of the adoption of free trade in England in 1846.
13. Give a general view of the Socialist School. What fundamental principle of the Natural Law does Socialism reject?
14. Give a brief account of the Catholic School — its defenders, its view of social evils, its main principles, the activity of Church and state. Why did the Catholic School spring up in Europe?
15. How does the Historical School differ from the Liberal School?

CHAPTER II

THE STUDY OF ECONOMICS. WEALTH. VALUE. PRICE

I. The Study of Economics

Divisions of Political Economy. — With regard to the method of studying Political Economy, the science is divided into three parts: the Historical, the Theoretical, and the Practical.

The Historical part of Political Economy is the narrative of the progress of a nation and of the causes affecting Political Economy, as commercial geography, the establishment of the consular service in the various cities and towns of foreign countries, the origin of protection or free trade in a country, the reports of the government on various subjects, the development of banking, the trend of immigration, export and import duties, cost of living in the past and the present.

Theoretical Political Economy studies the principles affecting the science; tells what is wealth, value, price; the factors affecting exchange, distribution, consumption, production.

The Practical part of Political Economy takes up the different problems of Economics, the actual applications of the theories seen in the second part, and studies such questions as taxation, free trade and protection, banking, insurance, corporations, the labor problem.

These three parts are not usually divided and studied separately except in some of the larger universities. They are ordinarily combined as here in the general course. Recent writers on Political Economy give much space to the Historical part.

In our study of Political Economy, we shall consider Production, Exchange, Consumption, and Distribution.

Before entering upon the subject of Production, we must take up the questions of Wealth, Value, Price.

II. Wealth

Definition of Wealth. — First, then, what is wealth? (Cf. E. B. Andrews, *Institutes of Economics*, p. 1.) In ordinary language, a man is said to be wealthy when he possesses a sufficient quantity of the goods of this world to place him not only beyond the reach of necessity and want, but within the possibility of satisfying all his tastes and desires. Such a man is a man of wealth. This is the popular notion of wealth.

Wealth, in the economic sense, has a different meaning. Economic wealth consists of those things capable of satisfying the wants of men, procured by labor, and exchangeable.

The things to which reference is made when speaking of wealth may be of two kinds: things material and things immaterial. Material things are all the various objects that exist outside of man, are corporeal, and capable of transference from one person to another. Immaterial things are found in man himself, cannot be transferred to another, and consist of physical properties, as health; or mental or moral qualities, as knowledge, skill, business instinct, honesty, or docility.

Wealth, as defined, may be public or private. Public wealth is that which belongs to a whole community constituted as town, city, state, or nation. Private wealth is that which belongs to individuals or individual corporations.

The definition of economic wealth needs some explanation.

Wants. — What is meant by wants of men? All men have wants. These wants it is difficult to classify, but in general the fundamental wants of man may be said to embrace the following things: Food, Lodging, and Clothing.

Food, lodging, and clothing may be just sufficient to keep a person alive and protected in his life, or they may rise in varying degree beyond the absolutely necessary and thus constitute the comforts required by a customary and decent living. Hence

the wants of men are classified as forming the Necessaries, the Comforts or Decencies, and the Luxuries of life. (Andrews, *Institutes of Economics*, p. 104.)

Wants grow with civilization. Men have many more wants to-day than in past ages. "Education, the taste for the beautiful, the need of social intercourse or of traveling from place to place, the desire for always knowing the latest news, or for amusement, nay, for fighting, which is more fashionable than ever — all these call into existence a number of important articles of wealth in the shape of libraries, telegraphs and telephones, carriages, tramways, omnibuses, newspapers, theatres, pictures, music, cannon, and ironclads." (Gide, *Principles of Political Economy*, 1900 edit., p. 37.)

The nature of these wants need not be considered. They may be as irrational and as frivolous as you please; still they are wants and as such enter into the subject of wealth. If any one were to pass through a large department store in one of our great cities, he would be at his wits' end to find a reason for a want for a quarter of the things he sees there. Necessity is the origin of many of the wants of men, but whim and fashion are often the sole reasons for many of them.

Objects Capable of Satisfying Wants. — Now, the goods which constitute wealth must be capable of satisfying a want. Thus, a coat, a hat, an automobile, a diamond, satisfy certain wants of man. Men want Peruvian bark, sassafras, roses, lilies, and some hundreds of other members of the vegetable kingdom, because these satisfy their wants, but there are thousands of plants which they do not want, because as yet science has not revealed the manner in which they can be made useful.

The fact that things can satisfy a want of man and thus become the objects of desire on his part must enter into the adequate concept of wealth. Things that have no relation to man's wants cannot be called wealth. Things which once were wealth but which have ceased to be wanted by man cease to be wealth. Were a man to gather a vast quantity of some commodity which was absolutely incapable of satisfying any possible want of man,

he could not be said to have wealth. If he could by any means create a desire on the part of men for the commodity he has gathered, he would thereupon become the possessor of wealth.

Objects Procured by Labor. — Moreover, the object which thus satisfies some want must entail in its procuring some exertion of man's activity. It must be procured by labor. There are many objects which satisfy man's wants, but which are procured without labor; for example, air, water, sunshine. Nature bountifully bestows them upon all men. They do not, therefore, usually enter into the classification of wealth.

It may be, however, that such natural gifts as air, water, sunshine, will, under certain circumstances, be brought within the classification of things procured by labor. Thus, air may be wealth when pumped into a coal mine; water, when furnished to the inhabitants of an arid region or a crowded city; sunshine, when reflected into a sunless room for photographic or other chemical purposes.

Objects Exchangeable. — Again, the objects capable of satisfying wants and procured by labor must be exchangeable or transferable. There are many things possessed of the first two qualities which lack the third. Thus, a man's reputation, his health, his credit, his business sagacity, his privileges as a citizen, are personal to the man himself and cannot in themselves be exchanged for other things.

Even material things will not be wealth, if their acquisition is so beyond the power of man that they cannot be made transferable. An object may in the abstract be capable of satisfying wants, but if it cannot by any possibility either now or in the future be such as actually to satisfy those wants by being exchanged, it is as if it did not exist at all. So, if a man possessed a storehouse full of objects which could not at any time be exchanged for other objects, he would not have wealth.

It must be noted, however, that this portion of the definition of wealth has more particularly reference to private wealth, for when there is question of the public wealth of a nation, certain

things constitute wealth which cannot be transferred or exchanged. Such, for example, are sewers, harbors, bridges.

Immaterial Goods as Wealth. — Whether immaterial goods, such as business talent, skill, knowledge, should be included in the computation of wealth, is a matter upon which all economists are not in agreement. Some, like Laughlin, calculate only material things; others, like Andrews, include immaterial things. Still others include immaterial things but classify them as "services."

Wealth may be considered under two aspects: as individual wealth, and as national wealth.

To classify immaterial things among an individual's wealth, and to say, for instance, that such a man, though he possess not a cent's worth of material things, is wealthy, because he has good talents, great knowledge of history, philosophy, etc., would, according to common parlance, take words out of their literal meaning and give them merely a metaphorical sense. But in speaking of a nation's wealth the fact that one nation has more skilled workmen than another in actual employment will make an evident factor in calculating its wealth. The possession by a nation of a greater amount of technical knowledge, of a higher degree of education, of a loftier morality in the matter of honesty and justice, will conduce to an increase of the material wealth of the nation. We cannot omit taking account of such immaterial things in computing national wealth, or in making a comparison between the productive capacities of different nations. They are, to say the least, conditions, the presence or the absence of which will exert an undoubted influence on the production of wealth.

Money as Wealth. — The question may be asked: Is money wealth? Money may be considered in two ways: either as a material object containing a certain quantity of substances, gold, silver, copper, nickel, paper, which can have exchange value, or as an instrument stamped and issued by the government and legalized as a medium of exchange.

In the former view, money is wealth, just as any other similar

commercial article is wealth. In the second view, it is not wealth; it is a medium of exchange. It can procure commodities which will constitute wealth. It is an "order" for goods which is operative as long as the convention of people lasts or the credit of the government which issues it is unimpaired.

It will be interesting and instructive to endeavor to point out which of the things in the following list should be accounted as wealth: air, sunshine, water, corn, wheat, grass, piano, hat, coat, shoes, privilege of citizenship, buildings, machinery, implements, work horse, race horse, government bonds, railroad stocks, mortgages, right of way, property in slaves, good will in a business, debts, personal qualities, business instinct and sagacity, health.

III. Value

Value in General. — We now come to the question of value. It is declared to be one of the most difficult questions within the domain of economics, and it is one about which there is the greatest divergence of opinion.

Let us first consider value in general. A wise statesman is of great value to his country; prudence is a virtue of great value; a diamond is an object of value. In each of these we observe an objective reality, an inherent goodness, a degree of utility for a certain purpose: the wise statesman for the protection and guidance of his country; prudence for the direction of man's conduct; the diamond for adornment. Here is something objective and internal contained within the things themselves.

But this is not sufficient. In order that objects may have value, there must exist a perception of their inherent and objective qualities by intelligences outside the objects.

Men, considering the objects, must perceive their use and their capacity to serve in some way towards man's preservation or perfection. When such is the case, there arises in men an esteem for the objects, because of the objective goodness or utility perceived, and a desire on their part to possess the objects.

This esteem of men for the objects and their consequent desire for the objects constitute the subjective part of value.

Value, therefore, is at once objective and subjective. Value arises not merely from the desire men have for an object. If it did so arise, value would be merely subjective. It arises also from the intrinsic goodness, absolute or relative, which is in the object.

Value in general, then, may be defined to be the desirability of an object on account of its absolute or relative goodness.

The definition of economic value may be derived from this general definition.

Economic Value. — The objects which enter into economics and to which may be attributed economic value, are all the various objects which constitute wealth. The intrinsic goodness which these objects have from the economic point of view is their economic utility, *i.e.* their capacity to satisfy a want, their production by labor, and their exchangeability. Herein consists the objective element of economic value. The subjective element is the desirability of this economic utility. The desirability arises when men perceive the utility of the object and as a consequence esteem the object.

Hence, economic value may be defined as the desirability of the economic utility of an object.

Economic value, then, arises from two elements: an intrinsic element which is found in the object of value, and an extrinsic or relational element which consists in the estimation of the object by intelligent beings.

Value in Use; Value in Exchange. — Value is divided by some writers into Value in use and Value in exchange.

Value in use refers to the use an object is put to, the service it renders, the want it satisfies. Value in exchange refers to the worth of an object relative to other objects with which it can be compared and for which it can be exchanged.

Many economists reject this division of value in use and value in exchange. According to these writers, value in exchange is the only kind of value with which Political Economy has to deal. Value in use of an object, they say, might better be called the

utility of that object. Economic value implies comparison with other things. It is a relative term. Value is " the power of a commodity to command other commodities in exchange." (Bullock, *Introduction to the Study of Economics*, p. 184; cf. J. Stuart Mill, *Political Economy*, I, p. 421; cf. also Ely, Seligman, Fetter, Gide, Davenport, Cairnes, Walker, Jevons.)

When the term " value " is used in the following pages, exchange value is meant.

Cause of Value. — What is the cause of value? Why is it that one thing has more value than another? A diamond, a watch, a coat, a barrel of flour, a pair of shoes, a loaf of bread, a pencil, a pin, have different values. How account for the difference of values?

The proximate cause of the value of a thing is the desire men have for that thing; the remote causes are its utility to satisfy a want, its scarcity, and its difficulty of production.

The wants of men may be natural or artificial, and man desires the various objects which satisfy his natural and his artificial wants, and thus these objects become of value. Thus, corn, coal, iron, are objects that satisfy man's natural wants, and man desires them and they have value. Gold, diamonds, laces, pianos, satisfy man's artificial wants, and man desires them and they have value. Thus, things have value because they are useful. Utility, therefore, is a primary cause of value.

If utility alone were the cause of value, the value of things should vary with the utility and be dependent on the nature of the utility. The intrinsic utility of a thing that satisfies a natural want is greater than the intrinsic utility of a thing that satisfies an artificial want, and the things that have greater intrinsic utility should have a higher value than others that possess less intrinsic utility. Such, however, as we know by experience, is not the case. The value of many things useful to satisfy artificial wants is greater than the value of things useful to satisfy natural wants. A diamond, a small quantity of gold, a piece of old lace, a piano, have much higher value than a ton of coal, a bushel of corn, a pound of iron.

Utility alone, then, does not explain the relative disparity that exists in the value of things. We must seek an additional cause.

This cause is the limitation of quantity or the scarcity of the objects. The more scarce a thing is, the more keen will be the desire of men for that thing. If diamonds were as plentiful as coals, diamonds would be as cheap as coals. They would not have the value they have to-day. Paintings of a certain kind are comparatively cheap and may be secured without much outlay. But the paintings of an ancient master may demand a fabulous sum, because of their scarcity. Scarcity, then, must be added to utility.

Furthermore, this scarcity or limitation of quantity will depend on the power men have of multiplying the objects in question. When shoes were made by hand, the scarcity of shoes was relatively great, because only a limited number of shoes could be manufactured in a given time; but when machinery was introduced that could turn out a great quantity of shoes in a day, the scarcity of shoes decreased, and the value of shoes decreased in proportion.

To conclude, then, the cause of value is the desire men have for things useful to satisfy their wants. This desire depends on the scarcity of things, and the scarcity depends on the power to multiply the things more or less easily.

Various Theories of Value. — The theories of value advanced by various economists may be summed up under the following heads: Utility, Scarcity, Difficulty of attainment, Labor. It would only lead to confusion to attempt to explain and refute all these several theories.

It may be worth while, however, to notice the theory that declares Labor to be the cause of value.

Labor as a Cause of Value. — It is the theory advanced by Adam Smith and Ricardo and, with some modifications, by Bastiat and Carey. It is especially the theory of the Socialist School, and because of the importance attributed to it by Socialists, it is advisable to consider the grounds of the assertion.

Marx, the practical founder of modern " scientific " Socialism,

distinguishes between value in use and value in exchange. Value in use is the utility of an object to satisfy human wants; value in exchange is the ratio of exchangeability of an object for other objects.

The two values, value in use and value in exchange, says Marx, have no connection between them; they are wholly distinct. Value in exchange does not depend on value in use. Value in exchange of an object depends on the amount of human labor put into it. Objects differ in exchange value because they have entailed in their production a greater or a less amount of labor. It is labor alone which gives them their exchange value, and not their utility to satisfy wants, not the estimation men have of them as things useful and desirable. A ton of coal, for example, has required a certain amount of labor to produce it. The exchange value of the ton of coal will be equal to every other commodity or sum of commodities which have required the same amount of labor. If the labor expended on the production of the ton of coal has taken five hours, and the labor expended on the production of a dozen pairs of shoes has taken five hours, the values of the ton of coal and of the dozen pairs of shoes are equal.

Marx's theory of value cannot be accepted. It is not true to say that the value of a thing depends solely on the labor put into it. A person may labor for days in the manufacture of an article — it may not therefore acquire value. If men do not desire the article, it will remain unexchangeable and of no value. And men will desire it only in so far as it has the property of being able to satisfy a want, in so far as it is useful.

A thing does not become more desirable or more useful because of the greater amount of labor that has been required to produce it. There is something behind the labor, which makes the object desirable, and which is the cause of the labor which has produced it; namely, its utility in relation to some want of man.

Moreover, as a matter of fact, objects produced with the same amount of labor have different values under different conditions. Such conditions will be the greater or less demand there is for the objects, and this demand again will depend on the greater

or less degree of utility perceived by men in the objects. Hence labor cannot be the sole cause of the value of such objects.

" Although the labor theory of value is still held by many followers of Marx, its place in the creed of scientific socialism is diminishing in importance." (Ely, *Outlines of Economics*, 1908, p. 184.)

Marginal Value. — As mentioned in a preceding page, the Austrian School attempts to explain value from a psychological and subjective point of view.

Value, they say, will depend on the estimation men have of the utility of a commodity. The commodity can be divided or conceived to be divided into small portions, the several portions serving to satisfy some want of man.

The want may be conceived to be divided into small portions or into degrees which range from absolute or relative necessity to a wholly dispensable want.

One portion of the commodity will satisfy an absolutely or relatively necessary portion or degree of the want, and other portions of the commodity will satisfy other portions or degrees of want, the portions and degrees of want gradually diminishing until the want reaches a stage where it almost ceases to be a want.

Each portion of the commodity will have a value dependent on the degree of want it satisfies. That portion of the commodity which satisfies an absolutely necessary want will have an infinite value. The last portion of the commodity which satisfies a want of the lowest degree, and which is on the margin where the want ceases to be a want, will have a very small value.

Now it is this last want, the marginal want, which determines the value of the commodity in the market. This constitutes the marginal value. Thus all commodities will have a marginal utility and a marginal value.

The marginal utility will differ for each individual, depending on many circumstances, but primarily on the amount of the commodity possessed by the individual. Thus, an acre of land is valued less by a man who has one thousand acres than it would be if he had only ten acres. A dollar is valued more by the

possessor of five hundred dollars than by the possessor of one million dollars. Marginal value of an object diminishes inversely with the supply one has of the object. This supposes that a man remains unchanged in his disposition with regard to the acquisition of things, and if this supposition is granted, the proposition as stated is called by Marshall the Law of the Diminution of Marginal Utility.

Yet there will be an average degree of utility for the great majority of all the individuals, and this average marginal utility will determine the average marginal value, which will be the actual value of the commodity.

For illustration, take wheat, of which a man has a certain quantity. What would be the value of a bushel of wheat, if he were to exchange?

The wheat may be divided into portions. One portion is needed by the owner for the making of bread for his actual sustenance. This portion will have an infinite value to him and he would not sell it for any price.

A second portion is needed for seed for the coming crop. This portion is of less actual utility than the former and will have less value.

A third portion is needed for the feeding of his stock. This is less needed than the other two, and has still less value.

A fourth portion is needed for the making of pastry. This portion may more easily be dispensed with and is of less value than the first three.

Now if the man wanted to exchange any portion of his wheat, he would exchange the last portion, which is of least utility to him and would have least value. The actual value of the wheat is estimated not by the sum total of the values of all the portions, but by the least useful portion or the marginal utility of the whole.

Another, who wishes to exchange boards for this man's wheat, will likewise offer that portion of his commodity which is the least useful to him, which has a marginal utility, and will have a marginal value.

If the exchange between the two is not demanded by any great necessity, the exchange value will be fixed at a certain level, which will be midway between the value that would be fixed by higher degrees of want and by no want at all. When many exchangers are in similar conditions, the exchange level of wheat and of boards will become the general relative exchange value of wheat and boards.

The theory of marginal value has been widely propagated in recent times and has gained acceptance among many economists.

It is objected to, because all things are not capable of such minute division as the theory supposes, and, as a matter of fact, people do not actually enter into any such classification of utilities and wants, nor do they analyze the value of a thing, distinguishing between total value and marginal value.

Moreover, men are not stable in their desires, there is no long permanency in their disposition to acquire things, nor does the acquisition of things satiate the appetite. As a result, marginal utility cannot be a general determinant of values. (Cf. Devas, *Political Economy*, p. 196; Antoine, *Cours d'économie sociale*, p. 274.)

IV. Price

Definition and Explanation of Price. — Price is the value of an object expressed in money. Value is not the same as price. Value expresses a relation of an object with other objects for which it can be exchanged. It depends, as we have seen, on its two principal elements, — utility and limitation of quantity. If the utility of an object is increased, its value increases; if the quantity is increased, the value of a given amount of it decreases.

But price is a relation of the value of an object to money. This relation we might express in any other material, as corn; in rice, as did the Japanese; in cotton stuffs, as did the African negro; in fox or otter skins, as did the Canadian trapper; or again in labor, as the Socialists would have it; but the civilized world has adopted the precious metals coined as money.

Money has become the measure of value. The value of all things is read in terms of money, and in estimating the relative values of different things, the things are not compared one with another, as was done in barter, but with the common standard, money, and thus their relative values become known.

The price of any object should bear some relation to the value of the object. By value here is meant exchange value or economic value, as explained in a preceding page.

The economic value is caused by three factors, — the utility of the object to satisfy a want, the scarcity of the object, and the difficulty of attainment or of production. The price of an object, therefore, will bear relation to the same factors.

It will depend, in practically equivalent terms, on demand, supply, and cost of production, — the utility of the object being the measure of the demand for it; the scarcity of it indicating the relative supply; and the difficulty of production depending on the cost to the producer in placing the object on the market.

Price will depend, moreover, on the rate of return for invested capital prevalent in the country or locality of which there is question. Producers will expect a return for their capital equal to the current rate of return for capital in general. In some countries and at some periods the average general return for capital invested may be comparatively small; in other countries and at other periods the average general return will be comparatively great. The prevailing rate of profit will exert an influence on the prices of commodities.

Price will depend, again, as we shall see later, in treating of money and prices, on the amount of money in circulation.

Scholastic Doctrine of Price. — According to Scholastic writers, there is what is called a just price, a price founded on justice. It demands that the price should maintain a proportion of equality between the object purchased and the sum paid for it, and hence that the price should be a sum of money equal to the value of the object.

This price is Legal, when determined by legal statute. During the Middle Ages, while the guilds were in existence, the prices

of most of the articles of commerce were fixed by law. To-day the law determines the charges for certain services, as cab service in certain cities, and railroad transportation.

The price is a Natural or Common price, when it is fixed by the common estimation of men. This common price will depend on the utility and the general cost of production of the object itself, as well as on various social circumstances, such as the abundance or scarcity of the object and of money, the different customs of life in different places, supply and demand, the expense and risk of transporting and marketing the object.

The common price is not a fixed and definite figure. It allows a certain amount of latitude. Hence, there is the highest, the lowest, and the average just price. The highest and the lowest limits are figures above and below which the article is not sold. The price may vary within these limits according to the greater or less intensity of the determining circumstances already mentioned.

At times, an object may have a specially high price beyond the limit of the highest price fixed by the common estimation of men, owing to the appreciation of the object by the owner, because of its peculiar utility to him and the special degree of privation he will suffer upon parting with the object. The excessive price he asks for the object would not in such a case violate justice.

The owner of an object would violate justice, however, were he to charge an exorbitant price, because of the special utility or necessity an object might have exclusively for the proposed purchaser; in such a case the owner would be endeavoring to make a profit out of a utility not his own but pertaining to another.

From this account of the Scholastic theory of price, it will be seen that most of the fundamental principles set forth to-day by modern economists were known years ago to Catholic writers.

The Liberal School claims that there is no such thing as a "just price," or rather that any price is just which results from economic principles or forces, such as supply and demand.

Buyer and seller are allowed to determine what sum of money shall exchange for any commodity or service, and the agreement between the buyer and the seller makes the price just, whatever be the circumstances under which the agreement is effected.

Market Price. — Market price is the price any commodity has in its market at a specified time. Thus, we may turn to the market list and find the market price of corn, of wheat, of sugar, of salt.

" A market exists when purchasers and sellers of a single commodity come together in such freedom of intercourse that they establish a single price at which the commodity exchanges." (Bullock, *Introduction to the Study of Economics*, p. 184.)

Each commodity will have a separate market, and we can speak of the steel market, the iron market, the wheat market.

There are wholesale markets and retail markets. Wholesale markets may be very large, embracing a whole country, and even be international. The prices will tend to be uniform throughout the whole market. Thus, wheat in the United States and Europe. The wholesale dealers compete in distant markets.

Retail markets are restricted to a single locality, to a street even, and prices will be different in each locality, even in each store. The retail dealers do not compete usually in distant markets.

The market price fluctuates up and down according to certain laws which we shall study presently, but there is a certain fixed price about which these fluctuations turn. This fixed price is called the Normal price.

Certain objects have their own special markets, in which dealers appear through their brokers and buy and sell and determine the prices of the objects. Such special markets are known as Exchanges.

Exchanges. — Among the principal exchanges may be counted the London Stock Exchange (established in 1773), which deals in all kinds of commodities, stocks, bonds, and bills; the New York Stock Exchange (established in 1817) and the Paris Bourse (established in 1726), which deal chiefly in public and corporate

stocks and bonds; the Consolidated Stock Exchange of New York, which deals chiefly in stocks. New York has also a Produce Exchange (established in 1862), dealing in agricultural products; a Cotton Exchange, for cotton; a Maritime Exchange; a Metal Exchange; and several others.

These exchanges have become a necessity in modern business. The New York Stock Exchange, after its organization in 1817, dealt at first in bank, canal, and industrial stocks. Later it took up railroad stocks and bonds, and more recently it has become a market for the stocks and bonds of industrial concerns. Government bonds, and the stocks and bonds of railroads and industrial corporations, now form the principal objects of trading in the New York Stock Exchange. Since the invention of the telegraph and the laying of the transatlantic cable, the New York Stock Exchange has become a world market surpassed only by the London Stock Exchange.

The enormous scope of the business of the Exchange may be realized when it is known that the shares sold there have reached in some years 200,000,000 in numbers, with a value of over twenty billions of dollars. (*Financial Review*, 1912, p. 45.)

The New York Stock Exchange has 1100 members. These members alone have the right to enter on the floor of the Exchange and to engage there in buying and selling transactions.

In order that stocks and bonds may be bought and sold on the floor of the New York Exchange, they must first be registered on the Stock List of the Exchange. The Exchange does not guarantee the value of the securities traded in, and cannot be held responsible for losses incurred in the selling or buying of stocks. Certain precautions, however, are taken before any security is admitted. Before a security can be listed, it must be reported favorably by the Stock List Committee and the Governing Committee. A statement is required of the organization, receipts, expenditures, and earnings of the company, in a word, of its general financial standing. Some corporations do not desire to have their financial condition known, and will not submit to the requirements necessary for listing. There

is demand, however, for the securities of such corporations, and as they are not admitted in the New York Stock Exchange, they must be traded in on the Curb, or in some other exchange — the Consolidated Stock Exchange of New York or the exchanges of other cities. The listed securities are accepted by the banks as good collateral for loans.

The transactions of the stock market may be carried on for investment purposes or for speculation purposes. In the former case, securities are actually bought and paid for in full and are turned over by the seller to the buyer, who keeps them for the income they yield. In the second case, shares are traded in for profit through the rise or fall of the value of the shares. Large buying orders will sometimes help to raise the price of the shares, which are then sold at the higher prices, thus securing a profit for the dealer. Or, again, shares not owned by the seller are sold with the intention of buying back later at a lower price and making a profit by the difference in the selling and the buying prices. In the regular exchanges no fictitious purchases or sales are permitted. Hence traders must be ready for the delivery of the security or commodity involved.

A " bucket-shop " is an organization engaged in the business of dealing in the differences of the prices of securities and commodities as quoted in the exchanges, without any intention of actually buying or selling.

Speculation in stocks may again be carried on by the system known as trading on margin. The customer deposits with his broker in cash a certain per cent, usually 10 per cent, of the price of the stock. The broker buys or sells the stock, as explained above, and when the transaction is closed by a corresponding sale or purchase, the customer is charged with the loss or credited with the gain, after paying the broker's commission and interest.

A great amount of trading, reaching into the millions of dollars, is done outside the regular stock market in what is known as the " Curb Market." The system is found in connection with large exchanges, in London, Paris, and New York. In

New York, curb trading, until 1922, was effected on the street outside the Stock Exchange. The securities usually traded in on the "curb" are securities that for various reasons have not been registered on the official Stock List of the Exchange. Some of the Standard Oil Company's securities are among those traded in on the curb. Trading on the curb is frequently done in securities of newly organized corporations which have not yet reached a position to be listed in the regular exchange. The prices of the shares of such corporations become fixed even before they have been actually issued. The disciplinary code that obtains in the curb market is established by custom and the consent of those engaged in the business.

The exchanges possess undoubted advantages. They afford a ready means of trading in securities and commodities. They furnish exact lists of the prices of objects and the momentary changes to which the prices may be subject owing to influences operating in any part of the world. Investors are safeguarded against fraud on the part of brokers, whose standing in the exchanges depends on their honesty and business integrity. The publicity given by means of the daily price quotations and the nature of the fluctuations in the prices of the shares make known to investors the condition of the corporation in which they contemplate investing. The flow of capital is directed along channels where the greatest productivity will result.

The prices of bonds and stocks dealt in in the Stock Exchange or of commodities traded in in other exchanges are determined by the demand and supply of these objects as expressed by the bidding of the brokers who are acting for outside investors. The prices will therefore, ordinarily, indicate the actual value of the properties, the securities of which are on the market, or of the commodities traded in. It may happen, however, that speculators may " corner " the market. A " corner " in the market is effected when a person or a syndicate buys up the whole of any stock or the whole supply of any commodity, in order to secure a monopoly and force others to buy at a monopoly price. Or, again, stocks may be manipulated by intriguing

persons who have personal designs upon different corporations, or by speculators who are seeking a profit through a rise or fall of prices. Owing to manipulation of this kind, there will be at times a great difference between the real values of the securities or the commodities and the prices at which they are quoted in the exchanges. On May 9, 1901, the shares of the Northern Pacific railroad, which never before had reached $100 a share, were forced to the price of $1000 a share, through the efforts of rival groups of capitalists to secure the property. (Cf. G. S. Pratt, *The Work of Wall Street.*)

Variations of Prices. — Objects have at different times a higher or a lower money value or price. The articles of general consumption on the market will require more money for their purchase at one time than at another. A ten-dollar bill will not buy as much at one time as at another. The purchasing power of money will not be the same at all times. In other words, prices rise and fall at different periods.

We speak here not of the prices of individual objects, but of general prices. Thus, it is a fact that between 1850 and 1873 general prices rose throughout the world, and after 1873 general prices have fluctuated, at times rising, at other times falling. During the past fifteen or twenty years, prices have risen considerably.

System of Index Numbers. — The fact of a general rise or lowering of prices may be ascertained by the use of a system known as the System of Index Numbers. One hundred commodities are selected and their prices found at some given time. The sum of all the prices of these commodities is computed, and this sum will be the index number for that time. At the end of ten years, the prices of the same commodities are again computed, and the sum of these prices will give the second index number. These two index numbers are compared, and prices will be said to have risen or fallen, according as the second index is greater or less than the former.

Our present purpose is to seek out some laws for the variations of prices.

Kinds of Variations. — Variations in price may be classed under two heads: —

1. Those variations in the market price which cover a long period of time and are very marked, the normal price increasing or decreasing considerably.

2. Those variations which occur from day to day and are never very great. They may be called oscillations.

To illustrate: In 1850, less than one hundred dollars would buy a house lot in the upper portion of New York City; to-day, one hundred thousand dollars would not buy the same lot. In 1873, 371¼ grains of silver, the amount contained in a silver dollar, cost $1.02; in 1893, the same amount of silver cost somewhere near 50 or 60 cents. These are some of the great variations that extend over great lengths of time. The minor variations, the oscillations in prices, may be seen in the morning papers for the various commodities sold in the markets.

Laws of Variations in Price. — The laws regulating the first kind of variations are as follows: —

1. Other things being equal, money value or price increases and decreases directly with the utility of the commodities.

This may be seen in the case of land. A lot in the center of a block is not so useful for commercial purposes as a corner lot, and the corner lot will be more valuable. A farm situated on the southern side of a hill will be more useful for the growing of grapevines than one situated on the northern side of the hill, and hence will be more valuable. Again, the utility of silver as money has diminished, — through the introduction of the various instruments of credit, checks, notes, bills of exchange, — and so the value of silver has diminished.

2. Other things being equal, money value or price increases and decreases inversely with the quantity of the commodities.

Thus, since the introduction of machinery in certain lines of industry, the quantity of articles produced has increased, with a consequent decrease in value. Again, through the occupation of land for farming purposes, the quantity of game has decreased and the value of game has increased.

We come now to the smaller oscillations of prices. The general law affecting these variations is the law of supply and demand: the price of any commodity depends on the quantity offered by the sellers and the quantity demanded by the buyers. The relation may be thus briefly stated: —

When demand is equal to supply	Price is normal.
When demand is greater than supply . . .	Price rises.
When supply is greater than demand . . .	Price falls.

When the supply of an object is such that there is sufficient to satisfy the current demand for it, the market will be peaceful and the price of the object will be normal or closely corresponding to the objective value of the object. If, for any reason, there should be created an increased demand for the object, while no change has taken place in the supply, the market will become more active. Those who now want the object, which, because of the relative scarcity of it, has become more difficult to get, will endeavor to obtain it by offering more money for it, with the result that the price of the object will rise.

In like manner, if the supply should increase, while the demand remains unchanged, the difficulty of obtaining the object will have diminished, and the sellers of the object will, in order to dispose of it, be content to receive less for it than would be the normal price. Thus, the prices will fall.

The Liberal School insists much on this law and would seem to give to it a sort of infallible efficiency, as if it were the unique factor in determining the variations of prices. Yet the law is not so absolute that it can be expressed with mathematical precision.

Those err, therefore, who state the law in the following precise mathematical form: "Value varies in direct ratio of the quantities demanded, and in inverse ratio of the quantities offered." This means that if the demand is doubled, the supply remaining the same, the price is doubled; and, if the supply is doubled, the demand remaining the same, the price is reduced one half.

The law is not a rigid law that will always produce its effect.

Many causes may enter to prevent its operation. Among other things, the price itself will act on supply and demand with the result that the price will tend to become normal. The following table will explain the way in which the strict law would be carried out: —

A. Demand,	10,	11,	12,	13,	14,	15,	16,	17,	18,	19,	20
Supply,	10,	10,	10,	10,	10,	10,	10,	10,	10,	10,	10
Price,	$1.00,	1.10,	1.20,	1.30,	1.40,	1.50,	1.60,	1.70,	1.80,	1.90,	$2.00
B. Supply,	10,	11,	12,	13,	14,	15,	16,	17,	18,	19,	2c
Demand,	10,	10,	10,	10,	10,	10,	10,	10,	10,	10,	10
Price,	$1.00,	.91,	.84,	.77,	.72,	.67,	.63,	.59,	.56,	.53,	$.50

In example *A*, let 10 in the first line be a figure representing the demand. It may be ten buyers, or ten hundred, or ten thousand. It increases through the intermediate stages — 11, 12, 13, etc. — to 20. In the second line, let 10 represent the supply, which remains unchanged. In the third line, $1.00 represents the normal price of the commodity.

It is claimed that, the supply remaining the same, if the demand is doubled from 10 to 20, the price should also be doubled from $1.00 to $2.00. But notice how the price will affect the demand in this transaction.

The demand increases from 10 to 11, and the price increases from $1.00 to $1.10. The demand increases to 12, and the price increases to $1.20. But when the buyers observe that the price is $1.20, they will begin to reflect and will cease to desire the commodity, and there will be a decrease in the number of buyers, so that the demand will fall below 12.

Again, notice the effect of the price upon the supply. The suppliers of the commodity, noticing the increase of price from $1.00 to $1.10, and to $1.20, will hasten to increase the supply, and thus equilibrium will be effected between supply and demand and the price will return to the normal, $1.00.

In example *B*, the figure 10 in the first line will represent the supply, which goes on increasing through 11, 12, 13, etc., to 20, where it is doubled. In the second line 10 represents the de-

mand, which in this case is supposed to remain fixed. In the third line, $1.00 represents the normal price, which, according to the law, should become one half as the supply is doubled.

Consider now the effect of the price on supply. As the supply increases from 10 to 11, 12, 13, etc., the sellers or suppliers notice the decline of price, and, as rational business men, will decrease instead of increasing the supply. They will work their factories on half time. They will turn their capital into other channels.

On the other hand, as the buyers notice the fall of price, they will grow more numerous, and the demand instead of remaining stationary will increase. Thus the equilibrium between supply and demand will be established and the price will return to the normal.

The equilibrium between supply and demand in both cases will usually be brought about long before the supply or demand can have doubled. It will at times take but a slight variation in price to bring it about. The law, therefore, is not to be taken as an absolute mathematical formula. Still it has great significance because it embraces in a short form a very widespread and far-reaching principle.

The principle of supply and demand cannot be accepted as the absolute and universal principle it is claimed to be by the Liberal School. With regard to many things it is impossible to know either of the factors, the amount of the supply or the sum of the demand, and yet, before an absolute law can be formulated, its elements should be known.

Account must be taken of the attitude of men's minds and of their desires with regard to different objects. Some things men cannot do without, and they will be willing to offer any sum for what they deem to be a necessity. In the wheat market, a falling off by a small fraction of the usual amount produced may cause the price of wheat to double, after a manner wholly out of accord with the law as stated above. Other products that do not enter into the class of necessities may diminish greatly in output

without any corresponding increase of price, because men will more easily endure deprivation of such objects.

Again, should an object become the fashion, the price will continue to rise in spite of the immense supply that may be put on the market. When the fad has ceased, the price falls sharply.

Fluctuations in market prices and the frequency of such fluctuations will depend in great measure on the nature of the objects. Thus, as Devas puts it (*Political Economy*, 1910 edit., p. 235), fluctuations in prices will be greater, —

(1) the more necessary the goods are to life;

(2) the more insignificant the goods are in the total expenses of the purchasers;

(3) the more perishable the goods are;

(4) the more expensive the goods are to keep;

(5) the more untransportable the goods are;

(6) the more uncertain the number of customers for the goods;

(7) the more the production of the goods is liable to misadventure;

(8) the more fixed and specialized the capital used in the production of the goods;

(9) the longer time that must elapse before there can be any serious increase in the supply of the goods;

(10) the less the possibility of using any substitute for the goods. When no substitute is possible, the commodity will be all the more subject to the law of supply and demand. These factors may vary considerably and thus affect the price of the commodity. When a substitute is possible, there will be a hindrance put upon the operation of the law, and the variation of the price will not be so great.

Prices and Competition. — Competition exists when one is at liberty to take what action is most advantageous to himself in regard to his employment and the disposal of his goods.

Competition has a great influence on prices. When prosperity exists in a country and there is abundance of money, the demand for commodities is increased. The immediate effect of the increased demand, before any special efforts can be made by

the producers to increase the supply of commodities, will be a rise in the prices.

But the producers, finding the markets profitable, will endeavor to supply the demand in the several markets. They will increase their plants in order to produce more commodities. They will put into their industries all the capital they can possibly spare, and they will borrow capital from loan institutions, offering every kind of acceptable security for the payment of the loans. Competition will be rife on their part to add to the supply and to sell their goods while the markets continue profitable.

The awakened activity in the various industries will produce an increase in the supply of commodities. The result will be a fall in the prices of commodities.

Again, the profitable nature of the several industries will appeal to all who have capital to invest. Promoters will become active in securing capital with which to enter the field. This will again add to the supply and hasten the fall in prices.

Finally, the producers are all striving to increase their trade, and the most effective means of doing so is to offer their commodities at lower prices. The prices will reach that stage where the producers will receive but small profits; in other words, they will fall to within near reach of the cost of production. Where absolute competition exists, there will always be many producers who will be content with small profits, *i.e.* who will bring the prices down near the production cost, and it is these producers who will determine the prices of the commodities.

But the costs of production will be affected by the competitive activity of the producers in their endeavor to supply a profitable market. The increased activity will cause a greater demand for raw material. It will cause a greater demand for capital. It will cause a greater demand for labor. The increased demand for these factors will bring about a rise in the price of raw material, in the price of money or interest, in the price of labor or wages. These factors constitute in great measure the costs of production.

The costs of production increasing, they will eat into the profits of the producers, and the prices of the commodities will have

to be raised by the producers in order to cover the increased costs and to make even moderate profits.

There will always be an interval more or less lengthy between the first moment of the high prices of commodities and the second moment when the costs of production — the prices of raw material, money, and labor — will level up to the prices of the commodities, and during that interval great profits will be made, and the industries will be exceedingly advantageous to the producers.

The effects of competition may be expressed in the form of laws as follows: —

1. Competition tends to equalize the prices of all similar products.

Suppose corn sells for 50 cents a bushel, the normal price. If a seller offers corn at 48 cents, all the buyers will at once outbid one another so that the demand will raise the price. If a buyer offers 52 cents for corn, all the sellers will underbid him and one another until the price falls to the normal.

2. Competition tends to reduce the price of all products to a minimum level determined by the cost of production.

By cost of production is meant the amount of capital consumed in order to produce a commodity. The wealth produced must be greater than the wealth consumed; otherwise the business would not pay and no one would engage in it.

This may be illustrated by the following example.

A capitalist puts into the shoe business $85,000. The expenses of the business in one year are distributed as follows: —

Services	$ 7,500
Wages	36,000
Materials	97,000
Rent	1,000
Taxes	250
Machinery and Repairs	3,000
Other expenses	5,250
	$150,000

He turns out 75,000 pairs of shoes in a year. The 75,000 pairs of shoes have cost him $150,000, or one pair of shoes has cost him

$2.00. He must sell his shoes for $2.00, in order to cover his expenses. But he wants a profit on his invested capital. It is to his interest to make the profit as large as possible, and to sell his product at the highest possible price. He may fix the price at $2.10 or $2.25 per pair.

But here competition sets in. There will be many producers of shoes who will be content with small profits and will charge but little above the cost of production, and they will determine the market value of the product. Each producer will strive to increase his own trade, and he will do so principally by offering his product at a lower price than his fellow-producers. Naturally he will not sell at or below the cost of production, since he desires a profit. The result will be that the general cost of the pair of shoes will be a minimum consistent with a low rate of profit.

TABLE

Capital invested	$85,000	
Pairs shoes produced in year	75,000	
Price of shoes per pair = expenses		$2.00
= expenses + 5% profit on capital		2.06
= expenses + 10% profit on capital		2.12
= expenses + 20% profit on capital		2.23

Competition price = $2.06.

This matter is clear enough when there is question of different products. Each separate product will have its price determined by the cost of production. But it constantly occurs that there come to one and the same market different portions of the same commodity, each of which has had a different cost of production.

Thus, in the New York market, there will be coal from Pennsylvania and from West Virginia, corn from New York State and from Ohio, lumber from the east and from the west. It must be evident, merely because of the freightage, that the cost of production of the different portions of these commodities will be greater in some cases than in others. And yet there is

but one price for the whole class of articles, whatever may have been the cost of production of each individual portion.

How is the market price determined?

Here is corn piled in this elevator. One bushel cost in producing and in placing on the market 69 cents; another bushel cost 64 cents; a third cost 59 cents. Will the market price be regulated by the maximum cost, 69 cents, or by the minimum cost, 59 cents, or will it be the average, 64 cents?

A distinction must be made. The commodities of which there is question may be such that they cannot be multiplied at will, or they may be such that they can be multiplied at will.

Thus cotton, live stock, the cereals, corn, wheat, oats, cannot be multiplied at will; the quantity that can be raised on a given area of land is limited. But shoes, nails, spades, hammers, and other such things can be multiplied at will.

Now with regard to the former class of commodities, viz. those which cannot be multiplied at will, the normal market price will be regulated by the maximum cost of production. And the reason is this: —

If the producers of this class of commodities foresaw that they could not get a price sufficient to cover their expenses, they would not produce the commodities, and there would be a deficit in the supply, with a resultant rise in the price.

Nor would it be to the interest of those producers who can produce at less cost to undersell those who produce at greater cost, because they profit all the more by the high prices, and their own production being limited, they could sell no greater quantity if they should undersell their competitors.

TABLE

A. Wheat.	A, B, C, D produce at cost of $.69 . . .	200,000 bushels
	E, F, G, H produce at cost of .64 . . .	200,000 bushels
	J, K, L, M produce at cost of .59 . . .	100,000 bushels
	Demand and supply	500,000 bushels
	Price of the wheat	$.69

A, B, C, D will not produce unless they get $.69. If they fail to produce, there will be but 300,000 bu., where 500,000 are in demand. The

supply decreasing, the price will rise. It will rise sufficiently to make it possible for A, B, C, D to produce, viz. to $.69. E, F, G, H, and J, K, L, M cannot produce any more than 200,000 and 100,000 bu., respectively, since the commodity, wheat, cannot be multiplied at will.

With regard to the second class of commodities, those, namely, which can be multiplied at will, the normal market price will be determined by the minimum cost of production.

From comparison with the other case, the reason is plain. Those who can produce at less cost may undersell those who produce at greater cost, and as the commodities can be multiplied at will, the supply will not decrease and the prices will not rise. The only result will be that those who cannot profitably continue production at the low market price will retire from that kind of business.

TABLE

B. Hammers.	A, B, C, D produce at cost of $.69 . .	200,000 hammers
	E, F, G, H produce at cost of .64 . .	200,000 hammers
	J, K, L, M produce at cost of .59 . .	100,000 hammers
	Demand and supply	500,000 hammers
	Price of a hammer	$.59

Here, J, K, L, M can sell their hammers for $.59, and the 500,000 demanders will come to them for hammers rather than to A, B, C, D, or E, F, G, H whose prices are higher. J, K, L, M will increase their actual supply from 100,000 to 500,000, which they can easily do, as hammers may be multiplied at will. A, B, C, D, and E, F, G, H will go out of the hammer business.

Monopoly Price. — Prices may in certain cases be taken out of the field of competition and be controlled by a person or a corporation having the exclusive right or ability to produce the article. We shall then have monopoly prices.

Kinds of Monopoly. — A monopoly may be of different kinds:

A Private monopoly is one possessed by an individual or a corporation.

A Public or State monopoly is one controlled by the state. Thus, with us, the mail system is a public or government monopoly. In Germany, the railroads are a government monopoly; and in England, the postal telegraph service is one.

A private monopoly may be Natural or Artificial.

A private natural monopoly exists when a private individual or corporation obtains control of a natural product of the land through ownership of the land, and becomes the sole producer of the article for commerce.

A private artificial monopoly exists when an individual or a corporation obtains the control of an article of trade or of a privilege of transportation. Such an artificial monopoly may be Legal or Capitalistic.

In a Legal monopoly, a legal right, *e.g.* by copyright or patent, is obtained for the exclusive production of an article of commerce, or for the exclusive performance of some service, such as the operation of railroads and street railways.

In a Capitalistic monopoly, a combination of capital absorbs all the principal dealers in an article and practically controls the market.

Monopolies can, in general, fix their own prices for the article under their control.

In public or government monopolies, the government fixes the price. When the government is not seeking revenue from its monopoly, it fixes a price sufficient to cover the expenses incurred in conducting the business.

Private monopolists are influenced, in fixing prices, by their business interests. Though a monopoly price may be fixed very high, yet there is a limit beyond which it will not go. That limit is reached when consumers refuse to purchase the article. When the price becomes exorbitant, people will cease to desire the article and will seek some substitute that will replace it. Monopolists are seeking profits, and they will not endanger their prospects of profits by making the price so unreasonable as to leave the article unsold on their hands. They know, too, that their profits will be greater when there are many purchasers at a low price than when there are few purchasers at an exorbitant price. Capitalistic monopolists also know that exorbitant prices would invite competition. Self-interest, then, will be the rule determining monopoly prices.

Monopolists can affect the prices by controlling the supply of the article. As they have the exclusive right or power to produce the article, they can determine how much shall be placed on the market. By controlling the supply, they can keep up the prices.

Ethical View of Monopoly Prices. — From an ethical point of view, monopoly prices are not unjust when they are fair and reasonable in the estimation of prudent men, and when the profits derived from the sale of the article are not excessive. In regard to many articles that contribute to the comforts or the luxuries of life, no one is obliged to buy the articles. Those who desire them may be supposed to be willing to pay even an exorbitant price. No injustice, therefore, is done the buyers when high prices are fixed for such articles of luxury.

It may be, however, that a monopoly will be secured in regard to some of the necessaries of life. These things the people must have in order to live, and when advantage is taken of this general need and prices are made exorbitant, justice as well as charity may be violated.

Price Fixed by Law. — The Classical School, which repudiates all intervention of the state in matters economic, denies both the right and the propriety of the state to fix the prices of commodities. This view has been generally accepted on the supposition that prices are determined by principles which work out their fulfillment irrespective of all action of the state. The state cannot control these principles.

In recent times, this view has been modified, and governments have claimed the right to regulate prices in certain cases. The Railroad Commission, for example, exercises the right to determine the freight and passenger charges of railroads. The intervention of the government, however, has hitherto been limited to corporations performing a public service of some kind.

The state can indirectly affect prices by restraining the unjust aggressiveness of trusts and monopolies, by condemning oppressive combinations that limit competition, and by opposing speculation in natural products.

Some writers claim that because the state is the guardian of justice and the protector of the feebler elements that compose it, it has the right and at times the duty of curbing the avarice and rapacity of dealers and of determining a maximum price, at least when there is question of the necessaries of life. Such may be said to be the view of the Catholic School.

QUESTIONS

1. What are the different methods of studying Economics? What are the main subdivisions of the subject? Why are wealth, value, and price studied before production?
2. What is the difference between the popular sense of wealth and the economic sense? What is public wealth? Private wealth? Give examples of public wealth.
3. Does a want have to be based on a rational motive in order to be a want in the economic sense? Explain what is meant by capacity to satisfy a want. Show how air, water, sunshine, can become objects of wealth. Give examples of objects that are not wealth because not exchangeable.
4. Should immaterial things be considered as wealth? Is money wealth? Which of the things in the list on page 37 are wealth?
5. What is meant by subjective and objective value? What is the difference between value in general and economic value?
6. Illustrate by practical examples how different things, such as a coat, corn, iron, diamonds, have value, showing how the various causes of value affect them.
7. Disprove the theory that labor is the sole cause of value in things. Explain marginal value by a concrete example.
8. Explain the difference between value and price. What is the Scholastic doctrine of price? Why is it called the Scholastic doctrine?
9. Where would you find the market prices of vegetables and fruits?
10. Explain dealings in stocks in the New York Stock Exchange. What is a "bucket-shop"? The "curb"? A "corner"? Give an illustration, fanciful or real, of stock manipulation.
11. Give historical instances of variations in general prices. Explain the system of Index Numbers.
12. Give practical examples in illustration of the laws of variations in prices. To what general principle may the laws be reduced?
13. Show by example that the law of supply and demand does not work out rigorously. Illustrate by examples the secondary causes of fluctuations in prices (p. 56).

14. What is the effect of competition on prices? on cost of production? Explain the laws affecting competition and prices. What effect on the laws is produced by the power to multiply the commodity at will? Illustrate.
15. What are the different kinds of monopoly? What determines a monopoly price?
16. Discuss the question whether the state should fix the prices of any commodities.

CHAPTER III

PRODUCTION. FACTORS OF PRODUCTION

I. Production

There is an immense amount of wealth in the world. The source of all this wealth lies primarily in the materials supplied by land and water. Innumerable forces are set at work upon the materials thus supplied, and these forces, under man's intelligent direction, produce economic utilities or things possessing value and constituting economic wealth. The study of the production of wealth will lead, therefore, to the investigation of the various factors that are capable of creating economic value in things otherwise worthless, and to a review of the numerous mechanisms, such as exchange, money system, banking, insurance, trade, transportation, corporations, that have been called into existence by production.

The study of production will show us how wealth is created. But the scope of economics does not end here. It must proceed to consider the problems that surround the consumption of the wealth produced, and to attempt to answer the difficult questions of how and in what proportions the created wealth is to be distributed among the several agents that have created it. We begin with the study of Production.

Definition and Factors. — Production is defined as "the operation by which man creates or augments economic utility in material goods." (Antoine, *Cours d'économie sociale*, p. 300.)

Other writers define it as "the creation of economic utilities by the application of man's mental and physical powers to the materials of nature" (Ely, *Outlines of Economics*, edit. 1908, p. 121); or, "The origination by conscious human act of wealth

or of direct gratifications such as commonly proceed from wealth." (Andrews, *Institutes of Economics*, p. 34.)

The factors that produce wealth are Nature, Labor, and Capital.

Nature means all that nature offers to man, the earth or land, its treasures of minerals, its forces.

Labor means the mental or physical acts of man applied to the materials or the forces offered by nature.

Capital is that part of wealth which is applied to the production of more wealth.

If we study the definitions of production given above, we notice that nature and labor enter into the essence of production. For production we must have nature, *i.e.* the offerings of nature, and labor or man's energy applied to nature. These two factors are interdependent. The things of nature would not produce wealth unless labor were applied to them, and labor cannot be performed unless nature offers the materials. These two are, then, the original factors of all production.

Not so capital. Capital does not enter into the definition of production. It is not in the same class as nature and labor. It is itself a product of nature and labor. It is, however, essential to production, for a laborer must have the means of subsistence, he must have clothing, tools, implements, and machinery. All these things constitute capital in its broad and general sense. The custom, therefore, which gives three factors of production — nature, labor, and capital — may well be followed, since it is practically universal.

Kinds of Production. — Production may be considered as Public or National and Private or Individual.

Public production means production by a nation or the sum of all productions by the individuals composing a nation. Private production means production by an individual or a set of individuals.

Product. — That which immediately results from the co-operation of the three factors of production, — nature, labor, and capital, — is product.

We speak of Gross product and of Net product. Gross product is the value of the sum total of the objects produced; Net product is the value of the sum total of the objects produced less the cost of production. Net product is also called Profit.

Cost of Production. — The cost of production embraces all the various expenditures that have been made in order to produce. It includes the following items: —

1. Wages paid for the labor employed in production, including salary paid the employer.
2. Rent paid for the use of land.
3. Interest paid for the use of the capital invested.
4. Taxes imposed on the articles produced, or on the industry itself.
5. Raw material.
6. Machinery and repairs.
7. Transportation to market, storage, advertising of goods.
8. Insurance.

All these items constitute the cost in private production. This cost must, first of all, be covered before there can arise any profit from the business, and it is this cost in private production which determines the prices of commodities.

The cost in public production is the cost borne by the state or nation considered as a whole. It will evidently be smaller than private cost, because in many of the items cited above the state does not suffer any loss. Thus, the money paid for rent, interest, and insurance generally remains within the state. It is transferred from one citizen to another. Taxes are a source of revenue to the state. The cost of transportation to market, storage, and advertising, which falls on certain individuals of the state, is a gain to other individuals within the same state. Practically, the only items that would enter into public cost might be reduced to: —

1. The wear and tear on brain and muscle of those employed and the expense incurred in keeping laborers in condition.
2. The raw material used up in industry. There is a gradual exhaustion of the supplies furnished by nature.

3. The repairs of machinery and the replenishing of the circulating capital.

Productive Industries. — As the world has progressed, productive industries have increased. At first society was very simple, and its wants were simple and easily satisfied. The industries needed to satisfy all the wants of primitive society were few. Hunting, fishing, the cultivation of the soil, in order to procure the food necessary for life, the making of clothing for wear, the construction of rude dwellings for shelter, constituted the first industries in society. Gradually people gathered into cities, and the wants of men increasing, new industries arose to supply these wants. There came about the development of industries, of arts and sciences, that we read of in the histories of the ancient peoples. Then a halt was called in the onward progress of the industrial world, and the long quiescence of the Middle Ages followed. The revival of modern industry began in the latter part of the eighteenth century, when what is known as the Industrial Revolution took place. Agriculture sprang into new life, new methods in the treatment of the soil were introduced, agricultural products commanded higher prices. In the manufacturing industries the domestic system had hitherto prevailed. Under this system material was given out by the manufacturers and carried to the homes of the laborers, where it was worked on for piece wages. Then the factory system was introduced, owing to the inventions in machinery which began in the last half of the eighteenth century. Industries increased throughout the world, domestic and international commerce opened up abundant markets for products, facilities of transportation brought the producer and the consumer in closer contact. The era of capitalism set in, and industries on a large scale, financed by accumulated capital, began to absorb and to replace small individual enterprises.

The industries engaged in production in the United States are countless. They may be classified as follows: —

Plant industries, which include lumbering and the cultivation of the cereals, cotton, vegetables, fruits, sugar-producing plants,

— the sugar cane and the sugar beet, — tobacco, forage products, — like hay, grass, and clover.

Animal industries, engaged in the raising of sheep, hogs, cattle, poultry, bees, the silkworm, draft animals; fishing; the hunting of wild game and fur-bearing animals.

Mineral industries, which relate to petroleum, natural gas, bitumen, salt, fertilizers, — such as gypsum, phosphates, and marl, — stone, cements, clays, iron, gold, silver, copper, lead, tin, zinc, mercury, aluminum.

Manufacturing industries, which are engaged in work upon the raw materials supplied by the preceding industries. It would be impossible to enumerate them here. Some of the principal manufacturing industries are the textile and clothing trades, metal-working, the building trades.

Commercial industries, including transportation by water and by land, telegraph, telephone, banking, wholesale and retail dealing. (Cf. A. P. Brigham, *Commercial Geography*.)

End of Production. — The question may be asked: What is the end intended by production? If we look around us, we see marvelous activity existing among all classes of men, and all directed to the production of various utilities; we see millions of toilers going forth with each rising sun to help in the great work of production; we see innumerable machines running from morning till night intent on the same work. And at the sight we may well ask ourselves: What is the end of it all?

Is the end of production mere wealth for wealth's sake? the accumulation of money in the vaults of the national treasury or in the banks of corporations or of some few favored individuals? Surely that is an unwarranted limitation of the end of production. Production is but one element among many which make up the activity of the composite social system.

Now the end of the social organization is directly the temporal well-being of the producers and indirectly the common well-being of society. Production as one of the elements of the social mechanism should also tend to the well-being of the individual as well as to the well-being of society.

And still we may have the spectacle of a country with its production estimated at billions of dollars, with 70 per cent of its producers making but a scant subsistence. We may have the spectacle of a country where immoral tastes are created and encouraged by the production of obscene literature, of immoral statuary and pictures under the name of works of art, where production busies itself more with luxuries than with necessaries, where in the interests of production family life is destroyed, the sanctity of the Sunday ignored, and the elementary education of the child hindered.

Laws of Production. — These considerations lead us to the laws by which production must be regulated, if it would attain its twofold end — the particular well-being of the producer, and the general well-being of society. They are the following:

1. Production should correspond to consumption, and should not excessively surpass the demand. The Liberal School declares that this matter will regulate itself automatically. And yet there have been commercial crises brought about by overproduction, which caused a glut in the market, the failure of many producers, and much misery among the laboring class who were thrown out of work. In some countries, production is regulated by syndicates composed of producers, who study the market and preserve an equilibrium between production and consumption.

2. Production of things injurious to health or morals should be prohibited, and production should be employed in satisfying the wants of men in the order of their importance, the necessaries first, then the decencies or comforts, and finally the luxuries.

3. Production should not oppose the moral interests of society by destroying family life, by infringing on the rest and sanctity of the Sunday, or by employing child labor and thus preventing the elementary education of children.

The state, by wise and moderate laws, should regulate these various matters. Hitherto the world has been dominated by the Liberal School, whose principle is that the state should not interfere at all in matters of production. This view is gradually

giving way to a more reasonable view of the functions of the state, and in recent years the state has passed wise and necessary laws affecting production and commerce. Witness the interstate commerce regulations, the child-labor laws, the coal strike interference, the pure food laws, the employers' liability act. (Cf. Antoine, *Cours d'économie sociale*, p. 304.)

Factors of Production. — We now come to consider each of the factors of production, — namely, nature, labor, and capital.

II. Nature

Place of Nature in Production. — Nature is an essential factor in production. It must furnish the materials of all industries, the soil, the minerals hidden in the earth, and the forces which can be utilized by the intelligent power of man.

Man creates nothing. He accepts the things which nature offers him, and uses them directly, as vegetables, fruit, coal, or indirectly, laboring on them as raw materials out of which he fashions other articles of use.

One of the primary objects which nature offers to man is land, and in regard to land the following points of physical geography enter into the calculations of economists. (Cf. Devas, *Political Economy*, 3d edit., p. 27.)

1. The character of the different parts of the earth as a dwelling place for man. Thus, climate has a perceptible economic influence on production. Those regions where a temperate climate prevails possess great advantages over others where severe cold benumbs or intense heat enervates the faculties. In very cold countries, the long winters and the deep snows and the scant vegetation are hindrances to plentiful production, whereas in very warm countries men are content to take what bounteous nature offers, and bestir themselves but little to turn to profit the abundant resources at hand. Moreover, in these latter countries there exists another impediment to enterprise in the violence of the physical forces, in the heavy rains, the dev-

astating floods, the earthquakes, and the hurricanes, which are so frequent.

2. The facilities of communication. England owes much of her commercial supremacy to her insular position, and the North and South Americas are favored by the large navigable rivers which course through them.

3. The fertility of the land.

4. The stock of minerals.

5. The supply of natural forces, such as water power for mills.

6. The abundance of fish to be found in the surrounding and inland waters.

7. The freedom from destructive agencies, as from tornadoes, floods, and earthquakes. This is a negative quality.

The more the land of a nation is possessed of these advantages, the greater will be the productive capacity of the nation, since production depends on the factors which conduce to it.

And again, the more generous nature is to a country in land, land products, and forces, the greater will be the number of objects possible of production and the greater will be the possible wealth of the country.

We can here understand the immense wealth that lies within our own country. It has a temperate climate, countless waterways, great fertility of soil, stores of minerals, great natural forces in its rivers and mill streams, rich fisheries, and comparative freedom from destructive agencies.

Production, as we said, will depend on the factors of production. Whatever limit there is in production will come from a limit existing in its factors. Now when we study nature as a factor of production, we find that it has its limitations.

Law of Diminishing Returns. — Land, the first offering of nature, with all its secret stores of wealth and its forces, with all its abundance of raw materials, is not equally extensive in all countries.

Again, in any one country, a considerable portion of the land is occupied by cities, towns, and villages, furnishing dwelling places for the inhabitants. Acres are devoted to streets, high-

ways, and parks. All this portion must be deducted from the quantity of land, when we would compute the productive land contained in a country. It is the first great limitation to nature.

But the productive land that remains and that supplies land products for food, raw material for manufacture, minerals, and forces, is itself subject to limitation. It is true that the productiveness of land may be increased by the application of more labor and capital to it. The more labor and capital there are put into the land, the greater will be the returns from the land, and every increase of labor and capital will mean an increase in the returns. Hence is derived what is called by some the law of Increasing Returns. Yet there will come a time when an equilibrium will be established between the forces applied and the product yielded, and when it will not be profitable to add another increment of labor and capital. " After a certain point is reached in the cultivation of every piece of land, it is found that doubling the laborers and doubling the capital put upon the land will not double the number of bushels which the land will yield." (Laughlin, *Political Economy*, p. 37.)

This fact has given rise to the formulation of the Law of Diminishing Returns, and indicates a further limitation of nature as a factor of production.

Before explaining the law, we should know what is meant by Intensive and Extensive production.

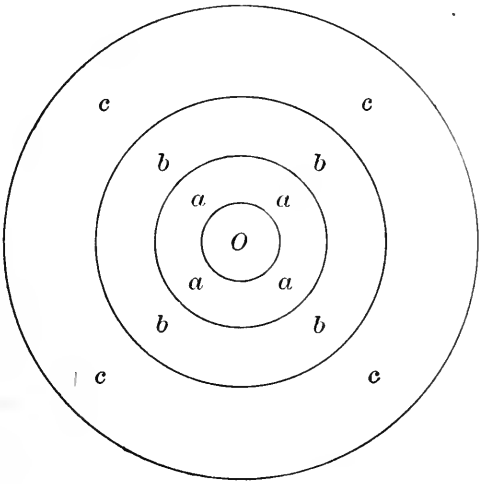
Intensive and Extensive Production. — Intensive production is the application of improved methods to a small area in order to secure the greatest possible results. Extensive production is the cultivation of large tracts of land by the ordinary means readily at hand.

In order to satisfy an increased demand for a product, the first step ordinarily is to seek out new fields for cultivation. This is extensive production. When at length all the land capable of cultivation has been turned to use, the increased demand will have to be supplied by intensive production.

It is to this latter kind of production that the law of diminishing returns applies.

Intensive production is carried on in the neighborhood of cities, and is an especial feature in countries long civilized, as in France and Belgium. Extensive production may be seen, for example, on the immense farms of our Western states.

The accompanying diagram will explain the matter:—



Let *O*, the center of the figure, represent a city. The inhabitants of the city will require for subsistence a certain amount of produce. At first, when the number of inhabitants is small, the lands marked *a a a a* will be used and will suffice for the produce needed. As the number increases, the lands marked *b b b b* will be put under cultivation. A still greater increase of inhabitants will bring the lands *c c c c* into use. This is extensive production.

Now when all the available lands have been made use of, the farms *a a a a* will, through the application of more capital and labor, be made to increase the product to satisfy a still further demand owing to a still further increase of population. The lands *b b b b* and *c c c c* will be treated in the same way on still further demand. This is intensive production.

Law of Diminishing Returns Illustrated. — The law of diminishing returns may be illustrated in the following manner:—

A certain piece of land produces potatoes under different conditions (A, B, C, D, etc.). The price of potatoes is 60 cents per bushel.

Conditions of Land	Labor	Capital	Bushels Per Acre	Gain	
				Total	Individual
A	1	$ 50	20	$ 12	$12.00
B	2	100	50	30	15.00
C	3	150	120	72	24.00
D	4	200	210	126	31.50
E	5	250	280	168	33.60
F	6	300	330	198	33.00
G	7	350	360	216	30.85
H	8	400	380	228	28.50
J	9	450	390	234	26.00

Column A, B, C, etc., represents a piece of cultivated land under different conditions of labor and capital. The labor and capital columns indicate the gradual new additions of labor and capital put into the land. As a result of the additions of labor and capital, the bushels returned by the land will continually increase, but while they will increase at first considerably, they will gradually diminish relatively to the amount of labor and capital. The same gradual relative diminution will be seen in the total gain column. If the land were cultivated by individuals, each one supplying the new addition of labor and capital and receiving equal shares of the returns, it will be seen, by consulting the individual gain column, that there will come about a condition (E) where the gain will be the greatest and beyond which it would not be profitable to add more labor and capital.

The law applies equally to mines. Here, as in the former case, every increase of product is attained by an increase of outlay in labor and capital, and there comes a moment when the smaller increase of product will not warrant the greater increase of outlay, and thus the profitable productiveness of the mine is arrested.

It will be noticed that the law of diminishing returns will

not bring about a total cessation of production, but there may come a time when, through the working out of the law, production will be retarded relatively to the amount of labor and capital employed in it, and a limit may be reached beyond which the increase of profitable production will cease.

The law may apply to local production from land. It may apply to the production of certain lines of commodities. But, if there is question of the world's production from land and mines, the limit is yet very distant, and it is rendered still more distant by new inventions in machinery which reduce the expenses of labor, and by the opening up of new lands for cultivation and of new mines for exploiting. Still it is a difficulty which will have to be met and settled by future generations.

III. Labor

Definition of Labor. — The second factor in the production of wealth is labor.

Labor means the mental or physical acts of man applied to the materials and forces offered by nature. Devas defines labor as "human action of which the proper end or natural purpose is some good external to itself."

This factor, like the former, is essential to all production. There can be no production without it. Even those things which are produced spontaneously by nature require, in order to become wealth, that man shall make them his own by at least some mental or physical act.

Requisites of Labor. (1) *Movement.* — Labor in its last analysis is reduced to movement, a change of place, whether of the entire object which is produced, or of the different parts which compose it. Thus a husbandman plows the earth and places in the furrow the seed, which is acted upon by the forces of nature and from which is evolved by their agency the perfect grain. The manufacturer places in position the several parts of an object, and steam or electricity operating a machine unites them and makes the completed object. The transporter

of goods brings the object from one place where it is of less value to another where it is of greater value.

(2) *Toil or Pain.* — Productive labor always presupposes some degree of toil or pain. Labor, to be labor, must have the motive of necessity. The fisherman who catches fish for his own pleasure, for the sport he finds therein, is not laboring, nor the boatman who rows five miles of a morning for exercise or recreation, nor the driver of a vehicle who goes forth for his daily drive of pleasure; but the fisherman who fishes for his living, to make money by his haul, and the boatman who rows passengers and collects his ferriage, and the driver who drives for the fare he will receive, are all laborers.

The motive and the end make the difference between these two classes of men. In the latter, the end which acts as an impelling motive is the necessity of living and the need of providing sustenance for the present or provision for old age and sickness. In the former, the end which inspires the actions is the intrinsic pleasure of the efforts put forth.

(3) *Time.* — Labor requires a certain expenditure of time, and in calculating the extent to which labor contributes to production, one must calculate the amount of time that is or can be devoted to labor.

The time out of a man's whole life which he can devote to actual labor is comparatively short. In some occupations that time is shorter than in others, because of the unhealthful nature of the occupation. Thus, copper, lead, and earthenware manufactures show a very high mortality among the workingmen, and lead and copper mining still higher.

Even in occupations that present no specially unhealthful features, the time of a laborer's life devoted to actual labor is very short.

Supposing the normal human life to be seventy years, if a man begins to labor at the age of eighteen and retires at the age of sixty, he will have labored but three fifths of his life. Calculating more closely, we find that a man of seventy, who labors from his eighteenth year to his sixtieth year, estimating 300 days

in the year and 8 hours a day, has worked 100,800 hours out of the 613,620 hours contained in his whole life, or less than one sixth of his life.

A man does not work every day of the year. In some trades it is impossible to work except in seasonable weather, as in agriculture, building, etc. Many days are to be deducted because of Sundays and national or state holidays during which no labor is done.

Nor does a man work all the hours of the day. A man's day of labor consists of 12, 10, or 8 hours. In European countries, the daily hours of labor are usually longer than in the United States. It may not always follow that the amount of product turned out is greater, when the daily hours of labor are longer, for the energy and the efficiency of the laborer may be greatly increased by the longer hours of freedom from toil and may result in an increase of production.

Laboring Class. — The whole amount of labor is done by the laboring class. Who constitute the laboring class?

The laboring class, broadly considered, embraces all those who produce, whether directly or indirectly. It embraces, therefore, as contributing directly to the product, the unskilled laborer, the skilled mechanic, the man in the office who designs the objects upon which the laborer works, lays out the plans of great undertakings, determines the machinery employed, the methods pursued. It embraces, as contributing indirectly, the teacher who informs the minds of the laborers present or future, the clergyman who instills into them principles of morality, and the police and the army who preserve peace and protect each one in his labor.

Efficiency of Labor. — Naturally, the more efficient labor is, the more it will contribute to production and the greater and the better will be the product. Now there are certain things which conduce to the greater efficiency of labor, some affecting the physical being of the laborer, some his mental being, and some his moral being.

(1) *Physical Helps.* — The labor of a country will be more

efficient the greater the amount of physical strength inherited by the laborers. The healthier the preceding race of laborers, the healthier will be the succeeding race. Anything which may cause a preceding race to deteriorate will work for harm in the succeeding one, and in so far reduce the efficiency of labor, and, by curtailing production, lessen the wealth of the state.

The amount and quality of food consumed by the laborer will affect the efficiency of labor. There is perhaps no class of laborers so well fed as the American. A large slice of common sour bread makes up the breakfast of many a French factory employee. Meat is scarcely tasted by the working classes of Holland. Potatoes, bread, and chicory constitute the entire sustenance of certain classes of laborers in Belgium. In the west of England meat is eaten but once a week. Such conditions, under which the laborer is reduced to the lowest possible amount of food, scarcely sufficient to keep life in the body, must evidently work against the efficiency of labor.

Again, the more perfect the sanitary conditions which surround the dwelling places and the workshops of the laborer, the more will his physical condition be bettered and the greater will be the results of his labor. Here also the American laborer is more fortunate than the European.

(2) *Mental Helps.* — The efficiency of a man's labor will be in proportion to his mental development. " Clearness of mind, quickness of apprehension, strength of memory, and the power of consecutive thought " will make one laborer better than another, and when possessed in a great degree by a whole nation or by the generality of laborers in a state, will increase the efficiency of its labor above that of a nation not so endowed.

An intelligent laborer can learn his trade in much less time than is required by another, needs little or no superintendence, is less wasteful of materials, learns quickly the use and the handling of the most delicate and the most intricate machinery.

(3) *Moral Helps.* — Self-respect, prudence, self-control, honesty, cheerfulness, and hopefulness are evidently factors making for the betterment of laborers as such. The driven slave, who

finds no cheer or hope in his life and who cannot improve his condition, will work as little as he can and is in sad contrast to the free laborer, who recognizes the responsibility reposed in him. The free laborer has a standard of honesty to which he conforms, and works cheerfully towards the betterment of his condition in the hope of more restful days to come.

Hierarchy of Labor. — Economists have made out what is called the Hierarchy of labor. It is a classification of the different forms of labor according to the economic utility of each, *i.e.* according to the measure in which each contributes to production. It is as follows: —

1. Agriculture.
2. Manufacture.
3. Labor of transportation.
4. Commerce.
5. Official employments.

The following tables will show how at different times the laboring class in the United States has been divided among the several occupations: —

1880 —	Agriculture	7,670,493
	Manufacture and mechanical mining	3,837,112
	Trade and transportation	1,810,256
	Professional and personal service	4,074,238
	All occupations	17,392,099
1890 —	Agriculture, fisheries, mining	9,013,201
	Manufacture and mechanical industries	5,091,669
	Trade and transportation	3,325,962
	Services: Professional	944,323
	Domestic and personal	4,360,506
	All occupations	22,735,661
1900 —	Agricultural pursuits	10,381,765
	Manufacturing and mechanical pursuits	7,085,309
	Trade and transportation	4,766,964
	Services: Professional	1,258,538
	Domestic and personal	5,580,657
	All occupations	29,073,233

(Stat. Abstr. U.S. 1912.)

It is gratifying to note that in the United States so large a number of persons belonging to the laboring class are employed in agricultural pursuits. There is little doubt that agriculture in all its various forms is the main source of the wealth of this country. It is agriculture that supplies the main food products and furnishes most of the raw material that enters into manufactures. It is a wise policy, therefore, to encourage agriculture by every possible means.

Such in fact has been the policy of many of our prominent statesmen. While it is almost impossible to induce those already engaged in other occupations and already located in the great cities to enter into agricultural pursuits, the United States government has sought to divert the tide of immigration towards rural districts. It has instituted at Washington a special Division of the Bureau of Immigration. This office furnishes information to immigrants which may direct them away from the seaboard centers, now overcrowded, to those sections of the country which offer special facilities for agricultural labor. (Cf. 1907 Report Dep't Com. and Lab., pp. 9, 139.)

Law of Population — Doctrine of Malthus. — Labor is a factor of production. It would be reasonable, therefore, to suppose that the more the laboring class increased, the greater would be the production and consequently the greater would be the wealth.

But if we restrict our view of production to that form of it which applies to the produce of land, the produce which serves for the sustenance of the human race, we shall find that theoretically there is danger that the increase of population may in time become so great that there will not be sufficient production to sustain it.

This fact was brought emphatically before the public mind by T. R. Malthus, an Englishman, in his work entitled *An Essay on the Principle of Population*, published in 1798.

His doctrine is contained in the formula: "Population tends to increase in a geometrical progression, whilst the means of

subsistence can only increase in an arithmetical progression." Thus,

Progression of Population: 1, 2, 4, 8, 16, 32, 64, 128, 256, etc.
Progression of Production: 1, 2, 3, 4, 5, 6, 7, 8, 9, etc.

A family of two has four children; in the next generation, there will be eight, and so on, in each generation there will be a geometrical increase, until at the end of 200 years, the ratio between population and production would be 256 to 9; at the end of 300 years, 4096 to 13; and at the end of 2000 years, the difference in the ratio would have assumed enormous proportions.

To quote Malthus himself (*Essay*, Bk. I, ch. 1): "It may safely be pronounced, that population when unchecked goes on doubling itself every twenty-five years, or increases in a geometrical ratio.

"The rate according to which the productions of the earth may be supposed to increase, it will not be so easy to determine. Of this, however, we may be safely certain, that the ratio of their increase must be totally of a different nature from the ratio of the increase of population. A thousand millions are just as easily doubled every twenty-five years by the power of population as a thousand. But the food to support the increase from the greater number will by no means be obtained with the same facility. Man is necessarily confined in room. When acre has been added to acre, till all the fertile land is occupied, the yearly increase of food must depend upon the melioration of the land already in possession. This is a stream which, from the nature of all soils, instead of increasing, must be gradually diminishing. But population, could it be supplied with food, would go on with unexhausted vigor; and the increase of one period would furnish the power of a greater increase the next, and this, without any limit."

The doctrine is applied to the whole world usually, but it may be applied to a country or a state, and hence it may be that the population of a country or a state will increase beyond the

means of sustenance. The consequence of the increase of population over production and the upsetting of the equilibrium that should exist between population and production, will be destitution, misery, and want among the people, especially among the poorer classes, who have not the means to pay the increased prices of the necessaries of life. The increased prices will be brought about by the greater demand owing to the increased population, and the comparatively decreased supply due to the relatively smaller amount of production.

To quote again (Malthus, *Essay*, Bk. I, ch. 2): "These effects, in the present state of society, seem to be produced in the following manner. We will suppose the means of subsistence in any country just equal to the easy support of its inhabitants. The constant effort towards population, which is found to act even in the most vicious societies, increases the number of people before the means of subsistence are increased. The food therefore which before supported eleven millions, must now be divided among eleven millions and a half. The poor consequently must live much worse, and many of them be reduced to severe distress. The number of laborers also being above the proportion of work in the market, the price of labor must tend to fall; while the price of provisions would at the same time tend to rise. The laborer, therefore, must do more work to earn the same as he did before. During this season of distress the discouragements to marriage, and the difficulty of rearing a family, are so great, that population is nearly at a stand. In the meantime the cheapness of labor, the plenty of laborers, and the necessity of an increased industry among them, encourage cultivators to employ more labor upon their land, to turn up fresh soil, and to manure and improve more completely what is already in tillage; till ultimately the means of subsistence may become in the same proportion to the population as at the period at which we set out. The situation of the laborer being then again tolerably comfortable, the restraints to population are in some degree loosened; and, after a short period, the same retrograde and progressive movements, with respect to happiness, are repeated."

There are, however, certain checks on population which tend to prevent it from reaching the limit where subsistence could no longer be obtained and thus retard the working out of the law. Some of these checks are positive: war, pestilence, disasters, disease, to which all the human race is subject, and which together with the condition of starvation and want due to the over-increase of population, will tend to reduce the population. When there is question of a single country, emigration is another positive means of checking the overgrowth of population, and this usually takes place in a country where living conditions are intolerable.

These positive checks tend to prevent the over-increase of population and to bring about an equilibrium between population and production, so that the well-being of the race may not be disturbed.

But the positive checks are not sufficient to arrest the action of the law. Another, a negative check, is recommended by Malthus; namely, self-restraint with regard to marriage and the procreation of children. People are advised not to add to the increase of population. One who foresees that he cannot provide for a family should not enter into the marriage state, and, if already married, he should not have more children than he can well provide for.

As proposed by Malthus, the negative check is not immoral. When he counsels self-restraint with regard to marriage, he means that persons should not enter into marriage unless they have an assured means of providing for their offspring. When he counsels self-restraint among married people with regard to the procreation of children, he means that this should be taken in the strictly moral sense.

In his *Essay*, Bk. I, ch. 2, he says: "Of the preventive checks, the restraint from marriage which is not followed by irregular gratifications may properly be termed moral restraint." A note hereto is appended: "It will be observed, that I here use the term 'moral' in its most confined sense. By moral restraint I would be understood to mean a restraint from mar-

riage, from prudential motives, with a conduct strictly moral during the period of this restraint; and I have never intentionally deviated from this sense. . . ."

Such is the doctrine called the doctrine of Malthus. It has been defended by economists of great repute, and it has been rejected by others equally renowned. It has gradually permeated society, and has had a most pernicious effect, giving rise to many of the crimes against humanity so numerous in entire nations to-day.

The Malthusians, so-called followers of Malthus, seem to have cut adrift from all moral principle, and have taught that for the betterment of the human race its increase must be curtailed by every means however vicious and immoral. Hence the prevalence in many countries and in many parts of the United States of crimes against nature, of infanticide and abortion, and all the evil effects, individual and social, resulting from such a state of things.

Doctrine of Malthus Rejected.— (1) *From the Moral Standpoint.*— The preventive check, even if understood as a moral and prudential abstinence from marriage and the natural results of marriage, and even if advocated along strictly moral lines, is based on a too optimistic view of human nature, which supposes such self-restraint possible among the great generality of men, and especially among the too frequently ill-educated poorer classes.

It supposes an impossible degree of virtue among people who, by circumstances, surroundings, and lack of education and self-discipline, would naturally be least capable of possessing it. Hence the adoption of such a principle of action, if adopted at all, will undoubtedly be followed by all kinds of evil and vicious practices.

There is, however, a possibility that the principle will not be adopted at all by certain classes of people. Thus, there exists among the poorer classes a motive that would induce them to have as large a progeny as possible. This motive is the hope of the parents of increasing their own income through the work of

their children. The children are put to work at an early age and the wages of the children add to the family revenue. The grown-up sons and daughters, moreover, are relied on to support the parents in their old age. Indeed, the effects of the doctrine are seen not so much among the very poor, though they are gradually increasing even there, as among the wealthier and more educated classes, who are not wanting in the means to support and educate a numerous offspring.

The doctrine of Malthus is rejected by many on account of its pernicious tendency to the promotion of immoral practices. It is attacked by others from an economic point of view.

(2) *From the Economic Standpoint.* — It is denied that production has not kept pace with population. Whatever may have been the condition of things during the life of Malthus, since his time there has been an immense improvement in productive methods and an immense increase in the resulting product. The introduction of machinery, the large-scale methods of production only now in their beginning, the opening up of new lands, the intensive cultivation of old lands, the acquisition of new countries with all their untold wealth, have in the past century given production a great gain in advance of the growing population.

Nor is there any well-grounded fear for the future, for it is impossible to conceive that productive forces have reached their limit of efficiency or inventiveness. When new demands are made, new means of satisfying the demands will be created. The doctrine of Malthus has indeed ceased to be the bugbear it formerly was.

Yet it is given prominence to-day by many who would seek an easy way of explaining the misery and want that exist among the poorer classes, and who would divert attention from the real causes of present conditions.

These causes are not overpopulation and insufficient production, but are to be sought for rather in the improper methods of the distribution of wealth, in human injustice and selfishness, in the spirit of greed that closes the hearts of men to the dictates

of charity and fairness. The remedy lies in the awakening of a sense of justice and Christian charity in men, in the realization by mankind of a higher purpose than the accumulation of dollars for the gratification of ambition or sensual appetite, in the restriction, by wise legislation and governmental measures, of injustice and oppression. There are many to whom such a remedy does not appeal, and hence they ignore the real causes of the condition of the classes, and would set up another cause, the remedy for which would lie within the power of the classes themselves.

Hindrances to Production. — It must be said that, while population is ever increasing, the production of the necessaries of life, though at no time inadequate to supply the needs of mankind, may be hampered by several things, such as: —

1. The absorption by private individuals of large areas of land for game preserves and parkways and the keeping of the same out of cultivation. Instances may be found in England and Ireland, where immense landed estates are held by families for generations, yielding little or nothing to the store that is needful for the sustenance of the nation.

2. The concentration of the productive forces in the production of commodities that gratify a passing fancy and are called for by luxury and extravagance. Such production does not add to the sum of the foodstuffs of the world.

3. The frequent limitation, by monopolies and combinations of capitalists, of the production of even the necessaries of life in order to keep up the prices.

4. The application of labor and capital to manufacturing industries rather than to agricultural industries. There has been in the United States a gradual falling off in the numbers engaged in agricultural pursuits as compared with all occupations during the past forty years.

The following table shows among all the occupations the percentage of those engaged in agricultural pursuits: —

1870 . . .	47 per cent	1900 . . .	35 per cent
1880 . . .	44 per cent	1910 . . .	33 per cent
1890 . . .	37 per cent	(Yearbook Dep't Agr. 1910.)	

People are attracted to the large cities, centers of manufacturing industries, and they become so accustomed to the excitement and pleasure of city life that they cannot be diverted to agriculture. Such is the experience of the United States. Even the vast majority of the immigrants, who come in hundreds of thousands yearly to our shores, are dispersed among a few of the large centers of the manufacturing industries. In the fiscal year ending June 30, 1911, 64 per cent of the immigrants to this country went to New York, Pennsylvania, Illinois, Massachusetts, New Jersey. (Cf. Annual Report, Dep't Com. and Lab., 1911, p. 171.)

Division of Labor. — (1) *In the Nation.* — We can conceive a family living by itself segregated by long distances from all others. In such a family the various occupations necessary for the production of the various necessaries of life would be carried on by the members of the family. The procuring of food, the making of clothing, the construction of buildings, farming, hunting, fishing, would all be done by one or another member of the family.

If, however, other families should gather about the first and establish a community, a town, it would then be possible to have a division of the occupations among the members of the increased community according to the capacities manifested by each for some one of the necessary occupations. Thus, there would arise in the community a baker, a carpenter, a builder, a procurer and seller of game and fish, and what was accomplished in the first place by one family would now be done by separate individuals of the several families living together.

In this way would be brought about the first form of division of labor into different trades and occupations. This division of labor is made possible by the coöperation of all the members of the several families. What was impossible when the family lived isolated and alone now becomes feasible where many are gathered together in a community. The baker who employs his whole time in baking bread must get what other food he

needs, must get his clothing, his house, from the labor of some other members of the community in which he lives. And so for all the other workers. Each depends on the coöperation of others.

Let the members of the community increase in numbers, and it will be readily seen that this division of occupations will expand to an even greater extent, until the smallest details of labor may become the sole occupation of many individuals, and the diversity of the special trades may become indefinite.

This division of labor applies to the whole state or country, and even to the whole world. Because of the internal trade within the state or country, people of various sections of the country are enabled to apply themselves to some particular industry to the exclusion of other industries. Because of international commerce, peoples of various parts of the world may apply themselves to a restricted number and kind of industries. Thus, there is a country-wide and a world-wide division of labor.

(2) *In the Workshop.* — There is a second kind of division of labor which applies to the workshop. Production may be carried on on a small scale, as is done by individual producers who have but a moderate capital to invest in business; or it may be carried on on a large scale, where, for example, many capitalists pool their capital and invest in some business. In a small business, one man may have to handle the article which is produced from its inception in the raw state to its completion as a finished product. Where the production is carried on on a large scale and many laborers are employed, the labor of producing the manufactured article may be divided among a dozen or more laborers.

It is only when there is large production, or production on a large scale, that it will be profitable to carry out this workshop division of labor.

(Illustrate by describing the work done in a hat factory, in an iron foundry, in a shoe factory.)

Advantages and Disadvantages of the Division of Labor. — Division of labor, whether in its first form or in its second, has its advantages and its disadvantages.

(1) *In the Nation.* — In its first form, when taken in its broadest aspect, it enables the people of one country or of one section of a country to apply themselves to the development of the peculiar advantages proper to their own locality. Thus, they may excel in mining or in agriculture or in manufacturing industry, and, applying themselves more or less exclusively to one of these occupations, may rely on other countries or other portions of their own country to supply them with the products of other occupations.

In the United States, agriculture is the chief occupation in the Mississippi Valley, mining in the Rocky Mountain region, manufactures in New England, each of these sections affording special natural facilities for its peculiar occupation, and the mechanism of commercial exchange which exists between all sections of the country obviates the inconveniences which might arise from this exclusive application to one occupation.

A serious disadvantage may arise to a country from this division of labor. In time of war, a country that applied itself exclusively to manufactures could not have food enough to live on if an effective blockade were established around its borders, and it would soon be starved into submission. An agricultural country under similar circumstances would suffer from the lack of manufactured articles. The United States would have little trouble in this regard, but some other countries are not so fortunate. Thus, diversity of occupations is advised in order to supply all the needs of a country at all times.

(2) *In the Workshop.* — When considered in its second form, as found in the workshop, division of labor has the following advantages: —

1. Complicated labor is broken up into very simple and mechanical movements easy to execute.

2. Portions of the divided labor may be assigned to each laborer in proportion to his capacity.

3. Great dexterity is acquired by the constant repetition of the same act.

4. There is economy of time.

5. There is economy of tools.

6. The period of apprenticeship is shortened. Less time is required to learn a small detail than a complete trade.

The disadvantages of this second division of labor are: —

1. The degradation of the laborer, who becomes a mere machine.

2. The great dependence of the laborer, who knows no entire trade, but merely a small part of a trade. He will find it difficult to get employment at any other branch of his trade. (Cf. Gide, *Principles of Political Economy.*)

These disadvantages are offset by the great advantages that are found in division of labor.

Machinery. — In 1769, James Watt took out the first patent for the steam engine, and since that time there has been a great revolution in labor. Machinery has been introduced in agriculture, in manufactures, in transportation, in mining, in every branch of production where hand labor can be employed.

The capitalist views with joy the advent of machinery, while the laboring class looks upon it with hatred and anger, rising up in riot at times and destroying the newly set up machines. This happened in England when the spinners and weavers found themselves on the point of being superseded by machines.

Advantages of Machinery. — Machinery has its advantages and its disadvantages. The advantages are: —

1. The employment of machinery increases production. One machine is able frequently to do the work of three, four, or even ten men, and there naturally will be an increase in the product.

2. It brings about regularity and precision of work. No matter how diligent or how skilled a hand workman may become, there is always the chance of deviation from the perfection of the design intended. A machine works with absolute precision and turns out identical products.

3. It saves time. Among handworkers much time is lost,

some part of it unavoidably, some part through the indifference and carelessness of the workers. A machine eliminates all the time loss due to human frailty or negligence.

4. The cost of production is diminished. This will naturally follow from the lessening of wages and the increase of the product.

5. The price of the finished product is lowered. In manufacturing industries, where the product can be increased indefinitely at the will of the producer, the supply can be made to equal the demand. Again, as the cost of production is decreased, competition will tend to bring down the price of the product near to the cost of production.

6. The price of raw material is in many cases diminished. Many raw materials are themselves a product of machinery in some form or other and can be turned out with a saving of cost and in greater quantity, allowing their sale with profit at a lower price.

Disadvantages of Machinery. — The disadvantages of machinery are: —

1. The introduction of machinery throws the laborer out of employment. This is a real disadvantage, and for the time being at least is sorely felt by the laboring class. In time, however, those thrown out of employment will find other employment in other trades or indeed in different branches of their former trade, through the increase of production brought about by the introduction of machinery. Thus, one hundred years ago there were eight thousand employed in the cotton mills in England; to-day, there are five hundred thousand employed, precisely through the introduction of machinery.

2. Immense loss of life and limb. In New York State the total number of injuries received in factories, quarries, and tunnel construction amounted, in 1910, to 25,390, distributed as follows: —

Temporary injuries	20,520
Serious, probably permanent	2,476
Permanent injuries	2,041
Deaths	353

(N. Y. State Dep't Labor, 1910 Report of Factory Inspection, p. 134.)

In the same year, the number of accidents from machinery was 11,245. (*Ib.*, p. 132.)

The laws, however, should safeguard against accidents, and during recent years much has been done in this matter. Factory inspection has become more thorough, and the prosecution of those who fail to observe the laws has been carried on more energetically.

IV. Capital

Definition of Capital. — The third factor in production is Capital. Capital is that part of wealth which is devoted to the production of more wealth.

Capital is always less than wealth. All of a man's possessions will not be devoted to productive purposes; all will not be sunk in business or in investments with the intention of reaping a monetary profit. A certain portion of what he owns will be devoted to the procuring of enjoyment, to the adornment of person or home, to expenditure which will bring no increase to his possessions.

A man may receive through inheritance $100,000. If he devotes $50,000 of that sum to leasing land, building a plant, and starting some manufacturing business, he has turned one half of his wealth into what is technically called capital.

It is the same with regard to the wealth and capital of a nation. All the wealth of the nation is not actually employed in producing more wealth. Only that portion of the wealth of the nation which is employed in producing more wealth through business or investment is economically termed capital.

The distinctive feature of capital, then, is that it is devoted to the production of more wealth. If a man in business makes a year's profit of $25,000, and expends the sum on diamonds and luxuries, no part of that profit becomes capital. It takes the form of wealth expressed in the diamonds and luxuries. Again, if he spends the $25,000 profit in paying laborers to build a race track about his grounds for his own amusement, the sum

expended does not become capital. If he devotes that sum to the purchase of new machinery and raw material to be used in his business, or if he expends it in draining and improving his farm land, so that it may produce a larger and a better crop, he has turned his money into capital.

In accordance with the same principle, oats are capital when fed to a dray horse which works on the farm; they are not capital when given to a race horse which the farmer keeps merely for fast racing.

Several things may or may not be considered as capital, according to their relation to the end, viz., the production of more wealth. Thus, food when partaken of for the mere pleasure of taste is not capital; when used for strength and muscle to be afterwards employed in labor, it is capital. Articles like jewelry, laces, pictures, from the point of view of the purchaser who buys them for the adornment of himself or his home, are not capital; from the point of view of the jeweler or the storekeeper who sells them, they are capital.

Capital Essential to Production. — Capital is essential to production, but not in the same way in which nature and labor are essential. Without the materials offered by nature and without some kind of labor on that material, there can be no production. Capital is necessary to production, because through it the material is procured or the laborer is enabled to apply his labor to the material. Thus, capital furnishes three things to the laborer: —

1. Sustenance, *i.e.* food, clothing, and shelter, while he labors or until he completes the product.
2. The tools he makes use of.
3. The material on which he labors.

Capital requires Labor. — Capital cannot produce of itself. Labor is requisite to make it productive. Men put thousands of dollars into banks, bonds, railroad and mining stocks, this or that business venture, and one who knows that these men live on the incomes received from these investments might be led to think that money naturally increases of itself. But money can

never increase of itself. A million dollars if left in a vault will not increase by the value of one cent in a thousand years.

Labor is the active principle which causes money to increase, and the incomes of the persons mentioned are all derived from the labor, if not of the investors themselves, then of some others whose activity is made possible by the capital invested.

Thus, the incomes from banks are derived from the labor of those employed in the undertakings set on foot by the loans of the banks to business men; the incomes from United States bonds are derived from the labor of all the taxpayers of the country; the incomes of railroad and mining stocks from the labor of the thousands who work on the railroads and in the mines; the incomes from business enterprises from the labor of the employees engaged in those business ventures.

Capital needs labor, therefore, to produce more wealth. An intimate dependency exists between capital and labor. Conversely, there exists just as intimate a dependency of labor on capital. Every hundred dollars' worth of capital judiciously invested induces more labor, while a diminution of labor is entailed by every withdrawal of capital, caused either by uncertainty in the business world consequent on great political upheavals, the fear of war, or government measures affecting the money standard, tariff rates, railroads, and corporations, or by the luxurious extravagance of the wealth owners whose expenses exceed their incomes.

Capital results from Saving. — Saving here does not mean hoarding. He who hoards day after day will increase his wealth, but he does not add to his capital. Saving means the abstinence from the use of wealth or a part of it, and the assignment of it to some one of the various means of increasing it.

Every one has the absolute right to employ his wealth in any way that may suit his own fancy, if he violates no ethical law. He may expend it all for his own pleasure. But if he does so, he will not increase his wealth, since he puts none out in capital.

To invest capital, then, one must forgo the things which his

wealth could procure for him, and the greater is his abstinence, the larger will be his capital. A farmer may save by curtailing his wants within the limits of his necessaries. The rich man may save by denying himself luxuries.

Capital is consumed in Production. — Capital is consumed in producing new wealth. It is consumed in factories, in wages, in the buying of raw material, in the procuring and the repairing of machinery, in all the various methods employed to make business successful.

When a man possessing $100,000 devotes $50,000 of it to capital in some business, he takes a certain amount of risk on the capital invested, in the expectation that his venture will return him not only the sum invested, but a substantial increase. His $100,000 would be safer, perhaps, if stored away in a steel vault, but at the end of ten years he will have no more than his original $100,000. If he invests one half of it and sinks it in factories, wages, taxes, machinery, he exposes his investment to the dangers of business disaster, of fire, of the knavery of employees, but should he be fortunate enough to escape these, and at the same time conduct the business judiciously, at the end of the ten years his capital will have reproduced itself twice or three times over and his wealth will have proportionately increased.

Kinds of Capital. — Capital is either Fixed or Circulating.

Fixed capital embraces the permanent fixtures of a business, such as factories, machinery, and tools, which are not used up in a single act of production. Circulating capital embraces all those elements of a business which are consumed in the act of producing. Such are raw material, fuel, and wages.

The fixed capital will endure for a number of years; the circulating capital must be continually renewed.

The return from fixed capital need not be immediate; the gain of profit on it may extend over the space of several years. The return from circulating capital must be immediate, since it must be renewed by immediate expenditures.

Increase of Capital. — The increase of capital depends on two

things, — the amount that can be saved, and the disposition to save.

Every laborer, in whatever class he may be, receives a definite compensation for his labor. Of this a certain portion must go to the procuring of the necessaries of life, food, clothing, shelter, for self and family. Another portion will be expended in procuring the decencies and comforts of life. All beyond this may be saved and go to make up capital. This surplus will depend on the amount received by the prospective capitalist. When profits and wages are high, the amount which may be saved by the employer and the employee will be greater.

The increase of capital, however, will naturally depend on the disposition to save. This disposition is not manifested equally by all. The untutored savage lives for the day and foresees not the needs of the morrow. Prudence and foresight, the principle of present self-denial for the future enjoyment, and the ambition for the betterment of one's condition — all come with education. Every one can save a little, if he will but learn to restrict his wants. This presupposes a degree of self-denial which can become possible only when one conceives the future advantage to be gained as more important than the present gratification.

QUESTIONS

1. Define production. What are the factors of production? What are the kinds of production? What is product?
2. What items enter into the cost of production?
3. What is the general classification of the productive industries of the United States?
4. Considering the end of production, what are the laws affecting production?
5. Why is nature necessary as a factor of production? What characteristics of land add to the productive capacity of a nation? In what degree is the land of the United States possessed of these characteristics?
6. What connection is there between the law of diminishing returns and production? What is intensive production? Extensive production? Illustrate by an example.

7. What is labor? What are the requisites of labor? Explain each by an example. Who constitute the laboring class?
8. What helps to increase the efficiency of labor? What have the laws of this country done to increase the efficiency of labor?
9. Give the classification of the different forms of labor in view of their economic utility. Why is agriculture put first?
10. Why should a wise government encourage agricultural pursuits?
11. Explain the doctrine of Malthus. Why should the doctrine be rejected?
12. What are the hindrances to production?
13. How has division of labor been brought about? What are its kinds? What are the advantages and the disadvantages of each?
14. Was the introduction of machinery an advantage to society?
15. Explain how capital is always less than wealth. What is required in order that an object of wealth may become capital? Give examples. What does capital furnish to the laborer?
16. Can capital produce wealth by itself? How is capital consumed? What are the kinds of capital? On what does its increase depend?

CHAPTER IV

EXCHANGE

Explanation of Exchange. — Production is not limited to the objects which satisfy the producers' own and immediate wants. Many things are produced which the producers will never use. The producers produce for others. This brings about that feature of Political Economy called Exchange.

Exchange is universal. It makes possible the division of labor already spoken of. By reason of exchange individuals may apply themselves to one trade or to one part of a trade, trusting to receive from others all the various things which they need.

Advantages of Exchange. — The advantages of exchange are manifest: —

1. Exchange brings into use a large amount of wealth which otherwise would remain unused.

All countries produce various commodities in much larger quantities than are called for by the wants of those countries. Thus, England produces more coal and manufactures than it consumes; the United States produces more wheat and cotton than it consumes.

Again, in the United States, the New England states produce more manufactures than are demanded by the dwellers in the New England states; the South, more cotton than it needs; the West, more farm products than could be consumed by the inhabitants of the West.

All these objects are wealth, and if exchange did not exist, the surplus of all these commodities would go to waste or indeed would not be produced at all. But by means of exchange, a

commodity can find markets outside of the immediate places of production, and for that reason it is extensively produced and brings into employment an immense amount of capital and labor.

2. Exchange enables men to utilize in the best way the productive capacities which they may have.

A great number of productive industries are required to supply man with all the things he needs for a comfortable existence. If exchange did not exist in any form, every man would have to apply himself to each of these industries in order to supply his needs, and for such universal production he would be but ill-fitted. But, because of exchange, he may apply himself to some single kind of productive industry for which he has greater aptitude, relying on exchange to furnish him with the various objects which he himself does not produce.

And thus it is that while the individual is laboring for others, the whole world is laboring for him. As De Laveleye says: "The poorest workman consumes the products of two hemispheres. The wool for his clothes comes from Australia; the rice for his pudding from the Indies; the wheat for his bread from Illinois; the petroleum for his lamp from Pennsylvania; his coffee from Java; the cotton for his wife's dress from Egypt or from Alabama; his knife from Sheffield; the silk of his necktie from France." (*Éléments d'économie politique.*)

3. Exchange places each object where it has greatest value. The tastes and customs of people differ. One man or one community may value what another cares little for.

4. Exchange increases the production of wealth. It increases the number of the markets.

Mechanism of Exchange. — Exchange has brought about the establishment of a vast mechanism necessary to facilitate it, including: —

1. The traders or middlemen who devote their whole time to the work of exchange.

2. The extensive systems of transportation, — wagon roads, railroads, and merchant vessels.

3. The weights and measures used in trade.

4. The money and credit required by trade.

5. The system of legislation affecting debts, bankruptcy, the regulation of railroads, the inspection of various products, and the establishment of Consular Agencies in foreign countries for the promotion of commercial interests.

Middlemen or Traders. — The middlemen or traders deserve special study.

The first kind of middleman to appear is the traveling trader, who carries about the wares he has purchased from the producers to dispose of them to the consumers. The caravans of the East still conduct trade in this manner. The village peddler is still to be found in our midst. As civilization develops, the traveling trader gives place to the shopkeeper, who advertises his goods and attracts the consumers to him.

(1) *Advantages.* — Society derives certain advantages from the trader: —

1. The trader serves as a middleman between the producer and the consumer, and saves each the trouble of seeking out the other.

2. The trader buys goods wholesale from the producer and sells them retail to the consumer, thus facilitating trade on both sides.

3. The trader keeps goods in stock, and so holds the market normal.

(2) *Disadvantage.* — A disadvantage may arise because of the trader, when the number of traders becomes very great. When the cost of production of an article is diminished through the introduction of machinery and the various economies that may be found possible in the continued production of an article, the price of the article does not always decrease; on the contrary, the prices of some such articles have risen. This may be brought about in some measure by the great number of middlemen engaged in the retail business. Each addition of a middleman tends to increase the price. The fact may be explained by the following example: —

Number of Shoe Stores	Expenses	Demand	Cost of Production per Pair	Price per Pair
1	$12,000	5,000	$2.40	$2.60
2	each 8,000	2,500	3.20	3.40
3	each 6,000	1,667	3.60	3.80

In a town, one shoe store is established, supplying the demand which is placed at the figure 5000. The expenses may be estimated at $12,000, including rent, taxes, wages, insurance, and the 5000 pairs of shoes to supply the demand, and may be considered as the cost the trader is put to in order to place the 5000 pairs of shoes on the market. The cost to him of each pair of shoes is, therefore, $2.40. He would have to fix the price of his shoes at $2.40 merely to cover expenses. If he is content to make twenty cents on each pair of shoes, he will sell his shoes for $2.60.

Now let us suppose two shoe traders in the town, each supplying half the demand, or 2500 each. The expenses for each may be fixed at the figure $8000. It will be less than in the former case, because there is less to pay for wages, the smaller demand requiring fewer employees, and for shoes, since the supply will need to be but half of what it was before. The expenses will be more than half of what they were in the former case, because certain items of expense, such as rent, insurance, etc., will not vary much in either case. The cost of placing the shoes on the market will be $3.20 a pair. Now if the shoe dealers are to make twenty cents on each pair over and above what may be here called the cost of production, they must charge the consumer $3.40 for a pair of shoes.

If three shoe dealers are established in the town and each supplies one third of the trade, we find by the same reasoning that the price of the shoes per pair might be $3.80.

It will be evident that the increase in the number of retailers of shoes will raise the price of shoes.

Transportation. — Another factor which enters into exchange and has an effect on the expense attendant on it is Transportation.

Exchange may indeed apply to the transfer of the title of ownership in things immovable, or to pure speculation, where no actual transfer is made of the commodities dealt in; but, ordinarily, exchange or trade implies the transference of the commodity exchanged from one place to another. This entails a great expenditure, and of course has an immediate influence on the price of the article.

The greater the difficulty of transportation, the greater the expense. The difficulties arise from (1) distance, (2) the nature of the commodity, and (3) the condition of the ways of communication.

1. It will be necessary at times to transfer certain commodities a great distance before a profitable market can be found for them.

2. In transporting articles we must consider their weight, their size, their fragility, and the difficulty of preserving them while in transit. The progress made in comparatively recent years in fast railways and fast steam vessels, and in the means of preserving perishable goods, has lessened difficulties which in the past were insurmountable.

3. All the various ways of travel offer more or less difficulties. Conveyance by country roads is ordinarily very costly. The rate for freightage by railroad is sometimes low and sometimes high. Transportation by sea is usually less expensive. (See Transportation, p. 277.)

QUESTIONS

1. What are the advantages of exchange?
2. What vast mechanism is originated by exchange?
3. Who are the middlemen? What advantages do they bring to society?
4. Explain by example how middlemen may increase the prices of commodities.
5. How does transportation affect the expense of exchange?

CHAPTER V

MONEY

I. Origin and Definition of Money

Development of Money. — Money has been brought into use by exchange. Before the introduction of money the exchange of goods was carried on by barter. Barter is a system by which the various things capable of exchange, as, for example, commodities and services, are compared one with another and the transfer of one for another effected.

The system of barter obtained universally in the past and endures even to-day in countries where the use of money has not been introduced. The inconveniences and the difficulties of such a system are easily conceivable. Great as the annoyances would be while commerce remained in its most primitive stage, they would have increased immeasurably upon the multiplication of occupations and the variation of products which modern advance has brought about. A new system was evidently needed, and as peoples rose higher in the scale of civilization, they soon abandoned barter and made use of some medium of exchange. Some object was taken which had a value recognized by all the community. That object became a standard of value. The values of all exchangeable objects were estimated by the standard, and it became an easy matter to determine the amount of one commodity that should exchange for another. The admitted standard was called money.

Money is to be conceived as a generic term embracing any object which serves as a medium of exchange and a measure of value. In the earliest times among the Greeks and Romans

money consisted of cattle. Hence the word *pecus* (cattle) has given rise to the derivatives *pecunia* (money), "pecuniary," "peculation."

Oxen were used as money in the old Homeric days. Sheep were used among the Italians; cattle among the Scots and Welsh at the time of the abandonment of Britain by the Romans. Rice was used as money in Japan, squares of pressed tea in Central Asia, furs in North America, glass beads in Africa, salt in Abyssinia, oil in the Ionian Islands, wampum in New England, tobacco in Virginia.

At an early date, the metals came into use as money. The earliest metallic Roman money was the *æs*, a copper piece. Iron was used in Lacedemon; lead, tin, silver, and gold were all used in early times.

All the various kinds of objects, all the several metals even, used at one time or another as money, have been gradually superseded by gold and silver. People have been led to the choice of these metals because of their physical properties, their luster, their malleability, their durability, and their high value.

There are not wanting some who declare that there was a sort of providence which directed men to the choice of gold and silver as the money of the world. Nature apparently supplied these two metals that they might be used as money. Others with more apparent reason declare that the choice of gold and silver was a purely fortuitous, arbitrary act on the part of man. And they point to the history of money throughout the world. The precious metals were chosen as a universal medium only in comparatively recent times. Peoples were attracted at first by the physical qualities possessed by these metals, just as some were attracted by the glass beads and the wampum, which became valuable because they were sought after as a means of personal adornment.

The metals were first made up in ingots and were weighed and assayed. Money dealers were obliged to carry about with them their scales and balances for weighing and their chemicals for testing the value of metals offered to them.

Later the ingots were cut into some kind of regular form, and their weight and standard were marked on them by some official stamp. Money was counted, not weighed as before. It is probable that money was first coined by a king of Lydia, a successor of Gyges, between 700 and 650 B.C.

Finally, the ingots were made into pieces like those now in use, small disks stamped on both sides and milled.

Properties of Gold and Silver as Money. — Gold and silver have special economic properties which fit them for the purpose of money. These properties are: —

1. Facility of transportation. Great values can be transported in comparatively small volume, and the cost of transportation is much less for gold and silver than for other species of merchandise.

2. Durability. They endure for a long period of time and when joined to alloys may pass for years in circulation without any great loss of material.

3. Identity of quality. As they are simple elements, chemically, they are the same the world over. Wheat, on the contrary, to make use of an object for comparison, differs in quality from section to section of the country in which it is raised.

4. Difficulty of counterfeiting. Gold and silver are recognizable by color, weight, and metallic ring, and their imitation is difficult.

5. Divisibility. Divide a piece of gold or silver in halves, and each half has half the value of the whole, while the two halves together are equal to the whole. Each fractional part has a fractional value proportionate to its weight, and all the fractional parts put together are equal to the original whole. (Gide, *Principles of Political Economy*, 1905 edit., p. 214.)

Definitions of Money. — Stanley Jevons defines metal money thus: "Coins are ingots of which the weight and fineness are guaranteed by the government, and certified by the integrity of the designs impressed on the surfaces of the metal."

Walker (*Money, Trade, and Industry*, p. 4) defines money thus: "Money is that which passes freely from hand to hand through-

out the community, in full discharge of debts and full payment for commodities, being accepted equally without reference to the character or credit of the person who offers it, and without the intention of the person who receives it to consume it, or enjoy it, or apply it to any other use than in turn to tender it to others in discharge of debts or payment for commodities."

The writer illustrates his definition by showing how tobacco came to be used as money in Virginia.

Tobacco was raised plentifully throughout the state. It was brought to the main stores and there exchanged for various commodities. A comparison was made between a certain weight of tobacco and those commodities, and an exchange effected. This was merely barter. But when the people of Virginia found that tobacco had a certain fixed value with reference to commodities, they began to use it in exchange for all sorts of things. It was used to pay the lawyer and the physician and the services of hired laborers, and this fact, that it was universally used as a medium of exchange for all things, constituted it money.

And so for other objects; the moment they become a medium of exchange, no matter what their use or purpose may be, they become money. Glass beads among the Arabians, wampum among the Indians of New England in the seventeenth century, shells and feathers among the islanders of the Indian Ocean, served these several peoples merely for personal adornment, and yet they were money.

"Money," then, as Walker says, "is always a medium of exchange; an intermediary thing; a means, not an end." (*Money, Trade, and Industry*, p. 7.)

Money is legal tender when the laws of the state declare it to be a full acquittal when offered in payment of a debt. A creditor must accept legal tender money when offered in payment by the debtor. Money is not legal tender when the state does not by law declare it capable of canceling debts.

Money may be legal tender to an unlimited amount, as are

gold and silver with us; or to a limited amount, as is our subsidiary coin.

Money is at par, at premium, at discount, with reference to some other money, when it equals in value some other money with which it is compared, or is worth more or less than that other money.

"Lawful money" in the United States includes gold coin, silver dollars, United States notes, and Treasury notes.

Money is foreign or domestic, when reference is made to different countries.

II. Kinds of Money

Money, with reference to the basis on which it circulates, may be divided into (1) coin or value money or metal money; (2) paper or credit money; (3) money of account.

Coin or Value Money. — Coin or value money is money possessed of real value. It may be standard, or subsidiary, or minor coin.

The *standard* coin of any country is "that in which its statutes make all public and private obligations and dues receivable and payable, to any amount." (Denslow, *Principles of Economic Philosophy*, p. 336.) In the United States, the gold coins are standard coins.

Subsidiary coin embraces the divisions of the standard coin, generally silver, below the unit of measure.

Minor coins are the smallest fractions of the unit of measure, usually of a metal other than gold or silver.

The silver dollar and the subsidiary and minor coins in the United States are at present Token money, *i.e.* each piece has less intrinsic value than it has face value.

The United States gold and silver certificates really belong to the class of value money, since each certificate represents a sum of gold or silver actually deposited in the United States Treasury.

Paper or Credit Money. — Paper or credit money is a promise to pay. It represents a value which depends on the credit of the issuer of the paper. Paper money is Redeemable or Con-

vertible, if it is exchangeable for coin or "lawful money," as is at present all our paper money; or it is Irredeemable or Inconvertible, if not exchangeable for coin or "lawful money." This latter kind of money is also called "fiat" money or "paper money" in the strict sense of the term. Examples of this money are the "greenbacks" and the Confederate notes issued during the Civil War. The "greenbacks," however, became convertible in 1879.

Convertible money may become inconvertible through the refusal or the inability of governments to provide actual coin for its redemption. "No paper money is convertible, the full, immediate and unconditional redemption of which is not, at all times, within the choice of the holder." (Walker, *Political Economy*, p. 153. Cf. Gide, *Principles of Political Economy*, p. 260 et seq.)

If the government would so determine, and all the people would grant consent, it would be possible to put into circulation this conventional paper money. It would serve all the purposes of money.

(1) *Defects of Paper Money.* — There are, however, three features in which paper money is deficient as compared with metallic money.

1. The value of paper money is precarious. It depends on the will of the legislator and can be destroyed by the power which created it. It has no intrinsic value. Metallic money has its own inherent value arising from its natural qualities independent of the stamp of the government.

2. The value of paper money is restricted to the country which issues it. It will not be received as money in foreign countries. Standard money will pass anywhere on its weight.

3. The value of paper money is changeable, as the amount and consequent value of such money depends on the will of the government. Even though the government tries to limit the amount strictly to the requirements of trade, trade itself will vary from period to period, being now brisk, now dull, and the amount of paper money will be greater or less than the actual

requirements. The value of metallic money depends on natural causes, on the output of the mines. Its amount ordinarily cannot depend on the will of man. In trade depressions following on greater activity, there may be a surplus of metallic money, but it can find outlets in foreign countries, whither the excess will naturally flow.

These disadvantages of paper money as compared with metallic money would disappear if all the governments of the world would consent (1) to make legal tender a paper money which would be acceptable in all countries; and (2) to limit the issue in each country to the amount required by trade, this amount not to be augmented arbitrarily, but in a measure predetermined for each nation.

(2) *Effect of Paper Money on National Wealth.* — The issue of paper money would not add directly to the wealth of a nation. It would do so, however, indirectly. It would set free the immense sum of metallic money now in use, and allow it to be employed as capital in various industrial pursuits.

Thus, the United States has a billion and a half dollars in metallic money. Other nations have like sums. Were these sums of coin used as capital in the promotion of production or in investments in foreign securities, great revenues would accrue to the countries so using them.

Again, paper money would indirectly increase the wealth of a nation by setting free the labor of various kinds now employed in the production of metallic money. This labor could be employed in other industries which would add to the wealth of the nation.

Besides all this, the issue of paper money would be a very easy and inexpensive way for a government to pay its debts. If it borrows money, it will have to pay interest. If it issues bonds, it burdens future generations with a heavy tax. Whereas, if it issues paper money, the sole expense is the cost of manufacture. In the Franco-Prussian war, France issued notes to the amount of $300,000,000, and our own country ordered several large issues of paper money during the Civil War.

In spite of its possible advantages, there are many economists who declare that paper money is the greatest plague that could ever befall a nation. This is due not so much to paper money in itself, as to the imprudence of governments in issuing a greater amount than is needed for circulation. We have had examples in our own history of the evils resulting from over-issue of paper. Another instance may be found in the time of the French Revolution, when the government issued "assignats" to the enormous amount of forty-five billion francs. This was twenty times the amount of coin then in the country. The inevitable result followed, and the assignats depreciated in value. In 1796, the hundred franc ($20) assignat was worth seven cents, and it required 4000 francs ($800) to buy a pair of shoes.

(3) *Signs of Over-issue of Paper Money.* — Now there are certain signs which indicate that the amount of paper money in circulation is greater than is required by the state of trade. These are: —

1. A premium on gold. When the amount of paper money is too great, its value will begin to depreciate. This fall in value will manifest itself in relation to metallic money. Gold will be sought for to pay foreign bills, and, to secure it, a premium will be paid for it. During the Civil War and for many years afterwards, gold stood at a premium in the United States.

2. A rise in the rate of exchange. Bills of exchange are always payable in gold, the international money, and will be affected as is gold itself by a depreciation in the paper money. The rate of exchange will rise.

3. The disappearance of metallic money. This will be brought about by the working out of the principle enunciated in Gresham's law (p. 128).

4. A rise in prices. When the paper money has depreciated considerably, prices will rise. This is in accordance with a principle affecting prices explained in subsequent pages. Sometimes there are quoted two different sets of prices for all commodities, one payable in metallic, and the other in paper money.

When these signs begin to manifest themselves, it is the duty

of the government to curtail the amount of paper money in circulation, if it would prevent the evils of inflation and restore the financial world to its normal state. This it can do by canceling the paper notes as they are returned to the government treasury. In April, 1866, Congress passed a law for retiring and canceling paper notes at the rate of $4,000,000 a month. In less than two years, $44,000,000 of the notes had been retired. (Cf. Gide, *Principles of Political Economy*, p. 280.)

Money of Account. — This expression is used to indicate the kind of money unit current in a country. Thus, in England, the pound is the money of account; in France, the franc; in Germany, the mark; in the United States, the dollar.

Kinds of Money in the United States. — The various kinds of money used in the United States are the following: —

(1) *Gold Coins:* $20.00 piece = Double eagle.
10.00 piece = Eagle.
5.00 piece = Half eagle.
2.50 piece = Quarter eagle.
3.00 piece
1.00 piece

The last three are but little used. The coinage of the $1 gold piece was discontinued by act of Congress, Sept. 26, 1890.

Gold coins must weigh 25.8 standard grains to the dollar (23.22 fine grains), and be nine tenths fine, *i.e.* nine tenths must be pure gold and one tenth alloy. They are legal tender to an unlimited amount.

(2) *Gold Bullion.* — Gold in blocks or bars uncoined. These are as good as coin and are much used in foreign trade, when gold is shipped by weight.

(3) *Gold Certificates.* — These are paper and certify that an amount of gold equal to the face value of the certificate is deposited in the United States Treasury. They can be exchanged for gold on demand. Their denominations are $10 and over.

(4) *Silver Dollars.* — The face value of the silver dollar is greater than the value of an equal weight of silver bullion, *i.e.*

it is token money. The silver dollar must contain 412.5 standard grains, and be nine tenths fine, *i.e.* it must have 371.25 grains of pure silver. The coinage of the silver dollar ceased in 1905. It is legal tender to any amount, except when otherwise stipulated in the contract.

(5) *Silver Certificates.* — These are paper bills for $100, $50, $20, $10, $5, $2, and $1. For each silver certificate, an equal amount of silver is deposited in the United States Treasury.

Gold and silver certificates are not legal tender. They are, however, receivable for all public dues.

(6) *Subsidiary Coins.* — These are silver, 50 cents, 25 cents, 10 cents. There formerly existed a three-cent piece, but it is no longer coined. The subsidiary coins are legal tender to the amount of $10. They contain 385.8 grains to the dollar, nine tenths fine.

(7) *Minor Coins.* — These are the nickel 5-cent piece and the copper 1-cent piece. The 5-cent piece contains 77.16 grains, 75 per cent copper and 25 per cent nickel. The 1-cent piece contains 48 grains, 95 per cent copper and 5 per cent tin and zinc. The minor coins are legal tender to the amount of 25 cents.

(8) *United States Notes.* — These are called "Legal tender notes" and "Greenbacks." They were originally issued during the Civil War, and are promissory notes of the government. They are paper and are not backed by gold or silver deposited in the treasury as are the certificates. Since 1879 they have been redeemable, *i.e.* the government will exchange coin for them. One hundred and fifty million dollars is kept on deposit in the Treasury for their redemption. When at first issued they were legal tender for all debts, public and private, except customs duties and interest on the public debt. Since 1879 they have been receivable for duties. Their total amount is limited to $346,681,016. When redeemed they are issued again.

(9) *National Bank Notes.* — These are paper notes of various denominations issued by the National Banks. As legal tender, they are limited. As the act of June 3, 1864, Sec. 23, says: they are "received at par in all parts of the United States in payment

of taxes, excises, public lands, and all other dues to the United States, except for duties on imports, and also for all salaries and other debts and demands owing by the United States to individuals, corporations, and associations, within the United States except interest on the public debt and in redemption of the national currency." They must be redeemed in coin on demand. Should the bank fail, the government will redeem its notes, reimbursing itself out of the capital stock on deposit in the United States Treasury.

(10) *Treasury Notes of* 1890. — By the Compromise Silver bill of July 14, 1890, provision was made for the issuance of treasury notes in payment for the purchase by the Secretary of the Treasury, from time to time, of silver to the amount of 4,500,000 ounces each month. These notes are redeemable in coin on demand and are legal tender for all debts, public and private, except when otherwise expressly stipulated in the contract. They are receivable for customs, taxes, and all public dues. Most of them have been redeemed.

(11) *Federal Reserve Notes.* — These are issued by the Federal Reserve Board for the use of the Federal Reserve Banks. They are based on eligible paper, bankers' acceptances, gold and gold certificates, and are receivable for taxes, customs, and other public dues. (See pp. 175, 181.)

(12) *Federal Reserve Bank Notes.* — These resemble the national bank notes, and have the same limited legal tender power. They are secured by bonds and short-time obligations of the United States. (See Pittman Act, Apr. 23, 1918.)

In January, 1922, the amount of money in circulation in the United States was $53.03 per capita.

III. Functions of Money

The functions of money are the following: a medium of exchange, a measure of value, and a standard of deferred payments.

Medium of Exchange. — The primary function of money is to serve as a medium of exchange in all kinds of commercial

transactions. In ancient times, exchange was carried on by barter. Articles were interchanged for each other without any intermediary. This method was most cumbersome and would be impossible in the present state of trade. Money became the medium. A farmer who gathers in a yield of grain from his land, and who wishes to procure clothing for himself and family, transforms his grain into money by selling it in the market. The money acquired is given to a tailor, who in return gives the farmer the raiment needed. The money has served as a medium between farm produce and clothing.

Measure of Value. — The second function of money is to serve as a measure of value for all things. All things have a certain value which may be estimated in terms of money, a money value or price. We say that a farm is worth $2000. The dollar is the measure of the value of the farm. In like manner, the foot rule or the yardstick is the measure of length, the quart the measure of liquid contents.

A farmer might estimate the value of a farm in bushels of wheat, a cloth manufacturer in yards of cloth. But money is the universally accepted measure of value of the farm and of all things of which the value is estimated. A man's wealth is estimated in terms of money. A nation's wealth is estimated in the same way. And thus there is secured a common measure that may serve for comparison between the wealth of different men and of different nations.

Were there no such common measure, much inconvenience and uncertainty would result from an attempt to compare two widely different substances. Since, however, we can estimate the values of all commodities in terms of money and have thus a common measure for all, it becomes easy to determine the quantity of one commodity equivalent to and exchangeable for another commodity. Instead of endeavoring to estimate how many yards of cloth could exchange for a ton of hay, or how many bushels of wheat could exchange for a coat, the value of each of these articles is translated into money, and at once their relative worth is known.

Standard of Deferred Payments. — The third function is to serve as a standard by which to judge of the sum to be paid at the close of a long-time contract. Business transactions involving credit are concluded generally within a relatively short time, but there are many such credit transactions which cover a long period of years. Money serves as the measure of the amount that is to be paid over at the close of the contract.

IV. Coinage

Definition. — "Coinage is the act of assaying, subdividing, and stamping a metal intended to be used as money." (White, *Money and Banking*, p. 29.)

The government does not certify the value of the coin, for that will fluctuate, according to the supply of metal in circulation, but the government stamp does certify as to the weight and fineness of the metal in the coin.

Formerly in our own country coinage was carried on by private individuals, for example, in California, and the known honesty of the individuals attested the fidelity of the coinage. Since, however, private individuals may falsify coins, the governments have by law reserved to themselves the right of coinage. Coinage was begun in the United States in 1793. There are at present four mints in which coinage is carried on. They are situated in Philadelphia, New Orleans, San Francisco, and Denver.

Coinage is said to be free when any possessor of bullion has the right to bring it to the mints and have it coined into money. Coinage of gold is free in the United States. Free coinage of silver existed up to 1873, but ceased in that year; a restricted amount of silver was coined by the government under the Bland-Allison act of 1878 and the Sherman act of 1890, but even this was stopped in 1893. In 1893, England stopped the free coinage of silver in India. In 1873, France limited the coinage of silver.

Seigniorage. — Seigniorage is a prerogative assumed by the crown in ancient times by which it deducted for its own profit

a certain percentage of the bullion brought to the mint for coinage. It is generally understood to-day to mean the charge made by the government to defray the actual cost of coinage. When the government bought silver at the market price (50 cents or 60 cents) and coined it into silver dollars, the profit accruing to the government was also called seigniorage.

"Right," "Heavy," "Light," Money. — When the coins that issue from the mint have the exact weight and fineness required by law, *i.e.* 25.8 standard grains (23.22 fine) for the gold dollar, and 412.5 standard grains (371.25 fine) for the silver dollar, such coins are said to be "right." When they have more grains than required, which happens generally through the inadvertence of the assayer, the coins are said to be "heavy." When, through the same inadvertence or through abrasion, they have not the requisite number of grains, they are said to be "light."

QUESTIONS

1. Explain barter. Does it exist to-day? What various objects were used as money among different nations? How did our present stamped coins come into use?
2. Why were gold and silver chosen as money?
3. When is money legal tender? What is "lawful money" in the United States? What are the different kinds of money? Give examples.
4. What are the defects of paper money? If a government were to issue a billion dollars' worth of paper money, would the wealth of the country be increased?
5. What are the signs of an over-issue of paper money?
6. Mention the kinds of money in use in the United States.
7. What are the functions of money? What is coinage? What is seigniorage?

CHAPTER VI

MONEY AND PRICES. GRESHAM'S LAW

I. Money and Prices

Relation between Money and Prices. — Prices are measured in money. Prices express a relation between the value of commodities and money used as a unit of measure. Prices tell us how much of a commodity will exchange for a given amount of money.

Prices tell us conversely how much money will exchange for a given amount of the commodity. In every sale or purchase that is made, money buys commodities, but it is just as true to say that commodities buy money. The purchaser of a commodity is the seller of money; the seller of a commodity is the buyer of money.

The price of a commodity will vary not only through a change in the value of the commodity, but also through a change in the unit of measurement. Thus, if a measuring unit is twelve inches long, any object measured by it will have a certain length expressed in terms of the measuring unit. The expressed length of the object will vary not only by increase and decrease of the object, but also by increase and decrease of the measuring unit. If the rule that serves as the measuring unit is only ten inches long, objects measured by it will contain a greater number of units of measurement than would be the case if the measuring unit were twelve inches long. Objects, though they do not really change, appear to be longer or shorter when reckoned in terms of the different measuring units.

It is the same with regard to commodities. The prices of commodities will depend on the status of the measuring unit,

money, and when we say that commodities have risen or fallen in price, it may be that it is the unit, money, which has changed.

Variations in Money. — Money may vary in two ways. It may increase or lessen in quantity, and it may increase or lessen in value.

That it may increase or lessen in quantity is evident, for gold and silver, the basis of all money, may be produced in greater or less abundance by the mines; may enter or leave a country through importation or exportation; may be used in greater or less measure by the industrial trades that deal in gold and silver in various forms. Thus, in 1891, the production of gold in the world amounted to $130,650,000; of silver, to $177,352,300. In 1901, the production of gold in the world amounted to $260,992,900; of silver, to $223,691,300. (Stat. Abstr. U. S., 1912.)

Money will increase or lessen in value, because the metals which constitute money have a commercial as well as a monetary property, and will depend for their value on the available supply of the metals, and the demand there is for them, as do all other commercial objects. Being commodities no less than steel, iron, copper, lead, they are liable to fluctuate in value just as any of these others.

Laws of Prices. — Hence, the following laws affecting money and prices are formulated (Gide, *Principles of Political Economy*, 1905 edit., p. 224):

1. Every fluctuation in the value of money causes a proportionate inverse fluctuation in prices. This means that whenever money increases in value, it acquires a greater purchasing power; it can command more commodities than before, and consequently commodities will diminish in price. Likewise, whenever money decreases in value, it will have less purchasing power; it can command less commodities than before, and consequently commodities will increase in price.

2. Every fluctuation in the quantity of money causes a proportionate change in prices. This means that, should the quantity of money in a country increase, the value of money will

decrease and the former law will operate, so that the prices of commodities will rise. Should the quantity of money in a country decrease, more value will accrue to the money remaining, and the prices of commodities will fall.

This second law is called the "Quantity theory of money."

The laws might be reduced to the law of supply and demand, for prices depend on the value of money, and the value of money will depend on the supply there is of it and the demand for it.

Supply of Money. — The supply of money consists of all the actual money of whatever kind employed in carrying on the commercial transactions of the country.

Says Walker (*Money, Trade, and Industry*, p. 40): "The supply of money consists of the quantity in circulation, multiplied into the average number of times that each piece changes hands in exchange for goods."

And J. S. Mill: "The supply of money is the quantity of it which people are wanting to lay out; that is, all the money they have in their possession, except what they are hoarding, or at least keeping by them as a reserve for future contingencies. The supply of money, in short, is all the money in circulation at the time." "Whatever be the quantity of money in the country, only that part of it will affect prices, which goes into the market of commodities and is there actually exchanged against goods." (*Political Economy*, Bk. III, ch. VIII, §§ 2, 4.)

The amount of money in circulation will depend ultimately on the output of the precious metals, gold and silver, from the mines. Gold and silver are produced like any other product, in order that the producers may make a profit. Just as men will invest their money in producing a commodity that has great value, and their efforts in producing will be determined by the rise or fall of the value of the commodity, so the producers of gold and silver will be influenced in producing it by the rise or fall in the value of the gold and silver.

When the value of gold and silver is high, there will be more profit derived from its production, and consequently its production will increase. Mines that are worked at great expense will

be run as well as those in which the expenses are less. But when the value of money diminishes, whether on account of the increased production or otherwise, then the profits will not be so great, and the most expensive mines will have to shut down. The result will be that the overproduction will cease and an equilibrium will be established.

Demand for Money. — The demand for money is a variable quantity, depending on many things. A certain amount of money is needed in a country to carry on its commercial exchanges. There is an immense amount of business done each day before the product, upon leaving the hands of the producer, reaches its natural destination, the consumer, and this business requires a great sum of circulating money.

It is not necessary, however, that the amount of circulating money should equal the sum of commercial transfers which take place. Those engaged in commercial exchanges are the producer, the wholesale dealer, the retail dealer, and the consumer. Money must pass from each of these upon an exchange of goods. The producer receives money from the wholesale dealer in exchange for his product; the wholesale dealer receives money from the retail dealer; the retail dealer from the consumer. But the same piece of money may do service for all these transfers.

We might follow the course of one piece of money, for example, a $20 gold piece. The producer of cloth stuff employs laborers who work for him. He pays a certain one of his laborers a $20 gold piece for his wages. This laborer is a consumer; he buys from a retail dealer a suit of clothes, and pays him the $20 gold piece. The retail dealer buys his ready-made clothes from a wholesale dealer, and pays in part payment for the clothes he buys the same $20 gold piece. The wholesale dealer buys his cloth from the producer, and in part payment for the cloth pays the same $20 gold piece. When it comes back to the producer, he may again pay it out to the laborer, and thus the circle is begun again. Again, the producer and the dealers may have bank accounts, and some of the above transactions can be carried through by the use of the same bank check.

In these ways, one piece of money may do service for many transactions. This is indeed what takes place in the world of commerce, and hence we need not be surprised to learn that the amount of money in circulation is much smaller than would seem to be required by the amount of business transacted.

The demand for money depends on: —

(1) *Number of Middlemen.* — It will be evident that the amount of money required by business will depend to a very great extent on the volume of exchange, or on the number of hands through which the product must pass before it comes to the consumer. Could all producers reach without any intermediary all consumers, the amount of circulating money required would be much less than is required in the case where the product must pass through many agents before it reaches its destination. When the volume of exchange is great, there will be a greater demand for money, the medium of exchange.

(2) *State of Trade.* — Again, the amount of money required in trade will depend on the state of trade, on the rapidity with which money circulates. When trade is very active and business is very brisk, commercial transactions multiply and a greater amount of money will be required.

When a community is prosperous, the consumers will possess more money and will desire more things and the demand for commodities will be greater. Producers will find ready markets for their products, they will increase the output of their products, and, in general, money will circulate more rapidly, and, as productive energy augments, more money will be in demand.

Every year at harvest time there is a great demand for money in the West and South, because of the activity attendant on the gathering in and moving of the crops. Usually, the demand is met by the Eastern banks.

When, on the contrary, trade is slow and business dull, a small amount of money may serve for all business transactions and there will be a lessened demand for money.

(3) *Growth of Population.* — The demand for money will depend on the growth of population. The greater or less the

number of the community, the greater or less will be the volume of exchanges that take place.

(4) *Amount of Credit Instruments.* — The demand for money will depend largely on the degree to which instruments of credit are used as substitutes for money. The amount of actual metallic money demanded by the commercial world will not be large, comparatively speaking, when trade transactions are performed by means of bank checks, bills of exchange, promissory notes, bank credits, and through the agency of banks and clearing houses. Only a small percentage of these transactions will require actual metallic money to pay the balances.

Stringency. — At times, because of the great activity existing in the commercial world, or for other reasons, there is not enough money in circulation for the purposes of trade. There is then said to exist a stringency in the money market. Relief is sometimes obtained from the government, which can deposit certain amounts of government money in the banks, secured by bonds, whence it can be readily drawn for use in commercial transactions. Relief may again be obtained by borrowing abroad, or by the transfer of wealth from poorly paying investments to loan money, because of the high rate of interest obtainable when such stringency exists.

All the factors mentioned above must be taken into account in interpreting the laws of money and prices. It is necessary to read the laws with the condition added, that all other things remain equal, *i.e.* that the several factors mentioned do not influence the operation of the laws.

The laws may be condensed into the formula: Prices vary inversely with the purchasing power of money. (Cf. Antoine, *Cours d'économie sociale*, p. 295 et seq.)

Commodities and Prices. — In studying the operation of the laws, account must also be taken of the amount of commodities offered for sale.

As money represents the demand for commodities, so commodities represent the demand for money. When commodities increase, there is an increase in the demand for money; when

commodities decrease, there is a decrease in the demand for money.

"The demand for money is made up of the goods offered for money, multiplied into the number of times these goods are sold and resold." (Walker, *Money, Trade, and Industry*, p. 40.)

"The demand for money consists of all the goods offered for sale. Every seller of goods is a buyer of money, and the goods he brings with him constitute his demand." (J. S. Mill, *Political Economy*, Bk. III, ch. VIII, § 2.) "As the whole of the goods in the market compose the demand for money, so the whole of the money constitutes the demand for goods. The money and the goods are seeking each other for the purpose of being exchanged. They are reciprocally supply and demand to each other. It is indifferent whether, in characterizing the phenomena, we speak of the demand and supply of goods or the supply and the demand of money. They are equivalent expressions." (*Ib.*)

Prices will then vary according to the quantity of commodities in the market. As Mill says: "Money acts upon prices in no other way than by being tendered in exchange for commodities. The demand which influences the prices of commodities consists of the money offered for them." (*Ib.*, ch. XII, § 2.)

Laws of Prices Illustrated. — The following explanation will perhaps show more clearly the relative variations of money, commodities, and prices.

1	Money		Commodities	Prices
	Quantity	Value		
(*a*)	+	−	same	+
(*b*)	−	+	"	−

The supply of commodities remaining the same, an increase in the quantity of money, represented by the + sign, will bring about a decrease in the value of money, indicated by the sign −, and the prices will rise, as shown by the + sign. When people have more money in hand, their desires for commodities of various kinds increase, and there will be a consequent greater

demand for commodities, with the result that these commodities will rise in price.

On the contrary, a decrease in the quantity of money will entail an increase in the value of money. People will restrict their desires, and the demand for commodities will be less, and the sellers will be forced to offer their goods for a less price, if they wish to sell them at all.

II	Money	Commodities	Prices
(*a*)	same	+	−
(*b*)	"	−	+

Next, consider the effect of a change in the supply of commodities while the quantity of money remains the same. The amount of commodities may increase, owing to the fact that improvements in production have made it more easy to produce; owing again to the fact that an increase in population is an increase of the productive capacity of a country. When this occurs, the sellers of commodities will have a greater amount of commodities on hand, and competition will cause them to sell their goods at lower prices.

If the amount of commodities decreases, the prices will rise, because there are fewer articles to supply the demand.

III	Money		Commodities	Prices
	Quantity	Value		
(*a*)	+	−	+	same
(*b*)	−	+	−	"

If money increases in quantity and commodities increase in corresponding amount at the same time, there will be no variation in the prices, as the two factors exercise influences which antagonize and so destroy each other. The increase of money would cause prices to rise, as may be seen in a former example, and the increase of commodities would cause prices to fall, as may also be seen in a former example, and the result will be that the prices will remain the same.

In like manner, when money decreases and commodities at the same time decrease in corresponding amount, the ultimate effect will be to keep prices on the same level, the decrease of

money, which tends to lower prices, being nullified by the decrease in commodities, which tends to raise prices.

IV	Money		Commodities	Prices
	Quantity	Value		
(*a*)	+	−	−	++
(*b*)	−	+	+	−−

It may be that the forces which affect prices may each act in such a manner as to have an augmented influence on prices.

Thus, an increase of money, which tends to raise prices, may be accompanied by a decrease in the amount of commodities, which also tends to raise prices. In that case the rise in prices will be higher, as is indicated by the signs ++.

Again, a decrease in money, tending as it does to lower prices, may be accompanied by an increase in the amount of commodities, which also tends to lower prices. In that case, the effect will be intensified, as indicated by the signs −−.

Distribution of Money. — How does the money in existence in the world become distributed? By price in trade.

Suppose that ten millions of dollars of gold is produced in the United States. It will not remain there if it is put into circulation. Follow its course.

Being put into circulation, it will cause prices to rise. This will invite imports from all outside nations, because the United States has become a good market to sell in. Money will exchange for the imports and will leave the country.

Gradually the amount of money will decrease and prices will fall, and the United States will no longer offer the same good market for imports. The amount of imports will gradually return to the normal. But in the meantime, the gold of the United States has become distributed among the nations.

The effect of prices in the distribution of money may be illustrated as follows: —

In the United States, because of the supply of money, $1 will buy 20 pounds of a certain commodity; price of one pound = $.05.

In England, because of a greater supply of money $1 will buy 15 pounds of that commodity; price of one pound = $.06.6.

In France, because of a still greater supply of money, $1 will buy 10 pounds of the same commodity; price of one pound = $.10.

Should such a state of affairs exist, at once the English buyers will buy in the United States rather than in England, because they can get more for their money, and the French buyers will buy in England and in the United States rather than in France, for the same reason.

On the other hand, the United States sellers will sell in England and better still in France rather than in the United States, because their goods will bring higher prices in those countries. At home, the United States seller will have to give 20 pounds for $1; in England he need give but 15 for the same $1; in France, he need give but 10 pounds for the same $1. Trade will tend to bring about in these countries a level of money supply and of prices.

To quote from Walker (*Money, Trade, and Industry*, p. 43): "Just as the bubble in the spirit-level runs out of sight so soon as the surface on which it is placed departs in the smallest degree from the horizontal, even before the practiced eye of the mason or carpenter could detect the inclination, so gold and silver commence to flow from a country where they have less purchasing power than in surrounding regions, before the most accomplished statistician or banker would be able to say that such a condition of prices had been reached."

A qualification of this movement will result from the cost of transportation.

II. Gresham's Law

Statement of Gresham's Law. — We now come to the discussion of a very important subject in connection with money. It is a law known by the name of Gresham's law.

Where a metal coin is the standard of a country, it will after a time come to pass that certain portions of the issue will become abraded and worn and consequently of less weight. This will not be noticed much by ordinary traders, and the coins whether heavy or light will continue to pass current. But there are

certain classes of people who take note of this loss of weight and consequent loss of value of coins, and because of these people, after a certain time, the following fact will be observed: the new, bright, unworn pieces of coin will disappear from circulation, and the worn, chipped, light pieces will remain.

Again, if the government should establish two metals as legal tender, gold and silver, and if the metallic value of one coin should be less than the metallic value of the other, the same phenomenon will be observed, viz., the more valuable coin will disappear from circulation and the less valuable coin will remain.

Again, if the government issues paper as legal tender, irredeemable notes, greenbacks, as was done in 1862 in the United States, it will be found that after a time the gold and silver will disappear and the paper money alone will remain in circulation.

This fact was noticed as far back as the time of Elizabeth, by Sir Thomas Gresham, and by him was formulated into the saying: "Bad money drives out good money, but good money cannot drive out bad money." The principle here expressed has become known as Gresham's law.

How Money Disappears. — It may be asked: How does the good money disappear? Where does it go to? There are three modes of disappearance, — hoarding, foreign payments, and sale by weight.

(1) *Hoarding.* — When people wish to provide against the future, they store away those things which have the greatest value. Of two gold pieces, they will select the heavier, the newer, the more perfect, for hoarding, while they will use the more worn, the lighter, for current expenses. Of gold and silver coins, they will hoard that which has the higher value. Of metal and depreciated paper they will hoard the metal.

Employers who are inclined to hoard, will store away the heavier coins, or the metal money as compared to paper, and will pay their business debts, their employees, their household debts in the less valuable money.

It is to be understood that the several kinds of money are all legal tender in the country. The gold dollar, the silver dollar,

the paper dollar, are each worth 100 cents. If you go to the market, you can get as much for the paper as you can for the silver dollar, as much for the silver as you can for the gold dollar. But the intrinsic value of each of these pieces of money may be very different. The 23.22 grains of gold in the gold dollar may be worth in weight 100 cents, but the 371.25 grains of silver in the silver dollar may be worth in weight but 50 cents, and the paper dollar may have no intrinsic value. Still each of these dollars may by law be made legal tender within the country.

If one wants to hoard money, he will naturally put aside that kind of money which has intrinsic value rather than that which depends on some extrinsic factor, viz., the law of the land, which, as it has been made by the will of the legislator, may be again unmade by the same will.

(2) *Foreign Payments.* — This is by far a more rapid means for the disappearance of good money. Foreign payments are made in gold specie, which passes not on its face value but by weight.

When, therefore, payment is to be made abroad by bankers, commission merchants, and others who deal with foreign countries, those coins which are heavier will be chosen, while the lighter coins will be kept at home and turned back into circulation, where they pass on their face value and are not objected to.

Thus, also, if the intrinsic value of a silver dollar is only 50 cents, the silver dollar will be worth only 50 cents abroad, and one will not pay a foreign bill with silver dollars, since he would have to pay twice the amount. He will exchange his silver dollars for gold dollars, and with these discharge his foreign debt. The silver dollar is worth 100 cents at home, because the law makes it legal tender; it is worth 50 cents abroad, because abroad only its intrinsic value is regarded.

(3) *Sale by Weight.* — This has been a still more frequent and more rapid means for the disappearance of good money in countries having a bimetallic standard.

When both gold and silver are legal tender and both are admitted to free coinage, the values of the two kinds of money,

silver and gold, may vary relatively to each other. Gold and silver are metals and commercial commodities. They have a commercial value, which will follow, as in the case of other commodities, the law of supply and demand. The 23.22 grains of gold contained in the gold dollar may, at one time, be worth one silver dollar. In that case, no profit could be made by melting gold dollars and selling them by weight. Should, however, a scarcity of the gold metal occur, the value of gold would appreciate relatively to silver. The 23.22 grains in the gold dollar might be worth 102 cents estimated in silver, and it would then be profitable to melt the gold dollars and sell them by weight. The legal value of the gold coin remains the same, but its commercial value as metal has risen. The silver dollar would remain in circulation, the gold would disappear.

Historical Instances. — History furnishes many instances of the operation of Gresham's law. Towards the close of the reign of Elizabeth, in 1601, the ratio of silver and gold was 11 to 1. In 1606, under James I, gold had risen in value, and it began to be exported and melted to such an extent that it became necessary to diminish the weight of the gold coins. The new ratio was 12 to 1.

In 1612, gold again acquired greater value than silver, and again it began to disappear. The ratio was changed to 13 to 1. This, however, gave silver a greater value than gold, and at once silver began to disappear. No new rating was made, but in 1614, a proclamation was issued prohibiting the exportation of the precious metals. It had no effect. Another proclamation appeared in 1618. Still no effect. In 1622 and in 1624, other similar proclamations followed. No effect. In 1636, seven persons accused of melting and exporting gold were arrested and fined over $40,000 and imprisoned until the fines were paid.

Nothing that the government could do could stop the disappearance of the precious metals. It was in this instance stopped by the gradual rise of the market price of gold until gold and silver were at par.

The same trouble arose later, and as gold or silver rose in

value, it began to disappear. This fact, causing immense worry to England's financiers, led England finally in 1816 to adopt the gold standard and to debase silver into mere token money.

Operation of Gresham's Law. — The application of Gresham's law will take place in the following cases: —

1. When a worn metallic money is in circulation with a newly coined money. This was the case that brought the phenomenon under Gresham's notice.

2. When a light money is in circulation with a good money, or a right money with a heavy money.

3. When a depreciated paper money is in circulation with metallic money. Our own history furnishes many instances of the operation of the law in this third case. In 1820, there existed 307 banks which were allowed to issue bank notes. They did so "without regard to capital or specie holdings." (Hepburn, *Contest for Sound Money*, p. 77.) As a result, the country was flooded with paper money, which depreciated rapidly. Boston and New England notes alone were at par with specie. Elsewhere paper notes were discounted at rates varying in different years, as follows: 1814, 10 to 20 per cent; 1815, 2 to 21 per cent; 1816, $1\frac{3}{4}$ to 23 per cent. In 1823, some Kentucky bank paper reached as high as 75 per cent discount. As a result of this depreciation of paper money, metallic money disappeared through hoarding, and banks were obliged to suspend payments.

Again, in 1837 and following years, owing to unsatisfactory banking laws and the power of the banks to issue unlimited paper, the same result was brought about and metallic money was nowhere to be had. (Hepburn, *Ib.*, p. 123.)

During the Civil War both the Confederacy and the United States offered instances of the withdrawal of specie due to the existence of depreciated paper money. (White, *Money and Banking*, p. 173.)

The amount of paper currency in the Confederacy in 1863 was $700,000,000. One gold dollar was worth in November and December, 1861, $1.10 and $1.15 in Confederate paper

money; in the year 1862, from $1.20 to $2.50; in 1863, from $3.00 to $20.00; in 1864, from $21.00 to $49.00; in April, 1865, $100.00. These figures show the scarcity of specie, its almost entire disappearance from circulation.

Somewhat similar conditions existed in the North. Several issues of paper notes had been made, and the volume of paper currency greatly increased. In December, 1861, the banks had 102 millions of dollars in specie and 184 millions in paper notes, and specie payments were suspended by both the banks and the Treasury. Specie disappeared entirely from circulation. (Hepburn, *Contest for Sound Money*, p. 196.) The gold dollar was worth $1.86 in paper money in May, 1863, and in July, 1864, was quoted at $2.22 to $2.50.

Limitation of Gresham's Law. — A limitation, however, is to be put to the operation of Gresham's law. A certain amount of money is needed to effect the commercial exchanges that are carried on. Should too great a portion of the current money disappear, the stock of money needed for commercial purposes would be insufficient, and there would be a rise in the monetary value of the coins, bringing them to a par with the market value. It would thus no longer be profitable to export or to sell by weight, and that traffic would be arrested.

QUESTIONS

1. What relation do prices express? Can the values of objects remain the same while the prices of the objects vary?
2. How does money vary? Give the laws of the variation of money.
3. What constitutes the supply of money? The demand for money? On what does the demand for money depend? How much money is needed in a country?
4. When does a stringency exist?
5. How do commodities affect prices?
6. Illustrate the laws of prices by examples.
7. How does money become distributed in the world? Give an example.
8. Explain Gresham's law. How does the better money disappear?
9. Can you give any historical instances of the operation of Gresham's law?
10. What is the limitation to the operation of Gresham's law? Illustrate by an example.

CHAPTER VII

BIMETALLISM AND MONOMETALLISM

Definitions. — Bimetallism is the theory that holds that two kinds of metal money, gold and silver, should be used as the money of the country, with full privilege of free coinage. Monometallism holds that only one metal, gold, should be used as the money of the country.

The question of Bimetallism *vs.* Monometallism has long been debated in the past, and came before the whole country for solution in the Bryan-McKinley presidential election in 1896. It seems to be definitely settled in this country in favor of gold as the single standard.

The low prices which obtained in the days of the silver agitation led many to urge the addition of silver to the existing gold medium, in order that more money should be put in circulation and thus cause prices to rise. But in recent years, owing to various causes, among which is the great production of gold, prices have risen considerably, and the main reason for the silver agitation, the alleged insufficiency of the monetary medium, no longer has weight.

Kinds of Bimetallism. — Bimetallism is National when it has reference to a nation. It is International when it has reference to the whole world.

Ratio. — There exists at all times a relation between the absolute values of gold and silver. A certain amount of silver is equal in value to a certain amount of gold. This relation is called the ratio between gold and silver, and is usually expressed in ounces. Thus, 16 to 1 means that 16 ounces of silver are equal in value to 1 ounce of gold.

The Legal ratio is the ratio established by law, *i.e.* the ratio which is assumed by the government as a standard when it coins gold and silver pieces. When the silver dollar and the gold dollar are coined by the government, they each contain a specified amount of silver or of gold. The proportion of silver and gold in the coined pieces is the legal ratio.

The Market ratio or the Market value of silver and gold relative to each other is the ratio established independently of the government by the conditions of the gold and silver markets. These conditions are determined by the supply and demand of the metals, the output from the mines, and other factors.

Historical Sketch of Bimetallism in the United States. — In 1792 bimetallism (of gold and silver) was established on the recommendation of Alexander Hamilton, first Secretary of the Treasury. The ratio between silver and gold adopted by the government (legal ratio) was 15 to 1. The gold eagle ($10 gold piece) contained 247.5 grains of pure gold, 270 standard grains. The silver dollar contained 371.25 grains of pure silver, 416 standard grains.

The gold dollar piece was not coined until 1849. As the theoretic standard for measuring the ratio, it would contain 24.75 grains of pure gold. As the ratio was 15 to 1, fifteen times 24.75, the amount of pure grains in the standard gold dollar, gave 371.25, the amount of pure silver grains in the silver dollar.

1780–1820. The yield of silver from Mexican mines was enormous. This influenced the market value of silver. The market value of silver fell below 15 to 1, although the legal ratio remained at 15 to 1.

1793. The market value of silver fell below 15 to 1 and never again regained that ratio. Because of the difference existing between the legal ratio and the market ratio, Gresham's law began to take effect and gold began to disappear.

1808. The market value of silver compared to gold was 16 to 1, while the legal ratio remained 15 to 1. Now the silver dollar was worth very much less than the gold dollar, although

exchanging as coin with the gold dollar. Ten silver dollars containing 3712.5 grains of pure silver would exchange for one eagle ($10 gold piece), and the one eagle would buy 3960 grains of pure silver in the shape of bullion at the market price. Evidently the two factors of Gresham's law, hoarding and foreign payments, would bring about the disappearance of gold. And such in fact was the case.

1817. Remedies for the disappearance of gold began to be suggested.

1834. A new coinage act was passed, making the eagle 232 fine grains and 258 standard, instead of 247.5 fine and 270 standard, as it had been by the enactment of 1792. The object of the act was to lower the value of gold coin, so that it might not disappear. This brought the legal ratio of silver and gold to 16 to 1, and made it equal to the market value.

1837. A new law was passed making the eagle 232.2 fine grains and 258 standard, and the silver dollar 371.25 fine grains and 412.5 standard. The coinage of both metals was made free and unlimited. The legal ratio was now 15.988 to 1 (practically 16 to 1). The market ratio of silver and gold was 15.7 to 1, and now conditions were the reverse of what they were before: silver overvalued gold, and, as a result, silver began to disappear and gold came into circulation. Silver continued to command a slight premium down to the year 1874.

1840. There was great production of gold from Russian mines.

1848, 1851. Gold was discovered in California and Australia. The result of this increase of the gold output was still further to depreciate gold bullion.

Another cause which tended to separate the two metals was the fact that silver was at this time absorbed in vast quantities by India. Gold came into use and silver disappeared. Even the small silver coins disappeared. This was because the half dollar was just one half the weight of one dollar, the quarter dollar one quarter its weight, and the ten-cent piece one tenth the weight of one dollar. Thus, two half dollars, or four quarter

dollars, or ten ten-cent pieces were equal to one dollar. Hence, it was as profitable to melt the minor coins as the whole dollar.

1853. To prevent the disappearance of minor coins, an act was passed making the half dollar equal $192\frac{3}{4}$ grains instead of $206\frac{1}{4}$ as before, leaving the legal tender value the same. The other smaller coins were treated in like manner. The effect was to depreciate the small coins, and it was no longer profitable to melt them. They became mere token money.

Before 1853 —	Silver dollar	$412\frac{1}{2}$ standard grains
	Half dollar	$206\frac{1}{4}$ standard grains
	Quarter dollar	$103\frac{1}{8}$ standard grains
	Ten-cent piece	$41\frac{1}{4}$ standard grains
After 1853 —	Silver dollar	$412\frac{1}{2}$ standard grains
	Half dollar	$192\frac{3}{4}$ standard grains
	Quarter dollar	$96\frac{3}{8}$ standard grains
	Ten-cent piece	$38\frac{2}{5}$ standard grains

In this year, one ounce of gold bullion was equal in value to 15.3 ounces of silver bullion. As the legal ratio was 1 to 16, the bullion value of a silver dollar was more than its face value. It was worth 104 cents.

1862–1879. Greenbacks came into use and drove out gold and silver. In 1879, specie payments were resumed.

1873. Gold was made the single standard Feb. 12. Silver was demonetized. The silver dollar was no longer to be coined. In its place was put a trade dollar of 420 grains standard, and all kinds of silver money were made legal tender only to the amount of $5 (afterwards, in 1879, $10) in one payment.

1876. The trade dollar ceased to be legal tender. A silver panic spread over the country. The value of silver fell so that the market ratio of gold and silver was 1 to 17.75.

Here began a rapid and constant fall of the commercial ratio of silver. It was attributed by silver men to the act of 1873, but other causes undoubtedly had an influence on the silver depreciation. The following are some of these causes: —

(1) Germany adopted a gold standard (Nov. 23, 1871).

(2) The supply of silver increased greatly after 1872.

(3) The Latin Union (a league formed in 1865 between France, Belgium, Switzerland, and Italy for the uniform regulation of coinage in these states) restricted the free coinage of silver (1874).

(4) The Latin Union ceased the coinage of silver altogether (1878).

1878. The market ratio of silver and gold was 18 to 1. Silver was remonetized by the Bland-Allison act. The old ratio of 16 to 1 was adopted. The act was said to have been brought about by those who wanted to pay old debts in depreciated money and by the owners of the silver mines. The act, however, did not restore free coinage of silver. The government was to buy bullion at the rate of not more than four million and not less than two million dollars' worth per month and coin it into silver dollars. A silver dollar of $412\frac{1}{2}$ grains standard was provided for at the ratio of 16 to 1. These silver dollars were to be legal tender for all amounts. Silver certificates might be issued for silver dollars. The act provided for the calling of a Congress of Nations to discuss the money question.

The effects produced by the coinage of silver as proposed and made obligatory by the Bland-Allison act were, that gold began to disappear, prices rose, there was depletion of the gold in the Treasury, and danger that the country would soon come to a silver basis. Efforts were frequently made to stop the coinage of silver, but without avail.

1887. The bullion value of the silver dollar was 75 cents, and the market ratio stood 1 to 21.1.

1889. The ratio was 1 to 22.1. The silver dollar was worth 72 cents.

1890. The Sherman act was passed, stopping the compulsory coinage of silver at the rate of at least two million dollars' worth each month, but causing silver bullion to be purchased at the market value to the amount of four and one half million ounces per month, for which Treasury notes were to be issued. It was optional with the government to coin any portion of the silver thus secured.

1893. The result of the law of 1890 and of the constant agitation of silver men to secure the free coinage of silver, was that the outside world began to lose faith in the United States, and much gold was exported from the country through the liquidation of American securities. The gold of the country was fast disappearing. Between 1890 and 1893, $150,000,000 in gold was exported, although commercial exports were greater than imports. The Treasury gold reserve in April fell below the $100,000,000 mark, which was held to be the danger mark. In President Cleveland's message to Congress, assembled in extra session in August, 1893, he pointed out that in three years the Treasury had lost $132,000,000 of gold and gained $147,000,000 of silver. If this continued, the country would soon come to a silver basis.

In November of this year, the purchasing section of the 1890 act was repealed. The feeling throughout the country was so unsettled, however, that fear of disaster fell upon every section, and while the actual supply of money was $24 per capita, a money panic existed and there was no money in sight. There were 15,000 failures, aggregating $347,000,000; 573 banks and trust companies suspended; bank deposits were reduced $36,000,000.

England closed the mints of India to free coinage of silver. Silver fell to 78 cents per ounce (par = $1.29 per ounce), and the ratio was 1 to 26.49.

1894–1895. The drainage of gold continued throughout these years, and the Treasury reserve was maintained only by the frequent issue of long-time bonds.

1896. Then came the gold-silver campaign of 1896. McKinley was the presidential nominee of the gold men, Bryan of the silver men. It was a battle between Monometallism and Bimetallism. The popular vote was: McKinley, 7,106,779; Bryan, 6,502,925. McKinley was elected. He had pledged himself to a gold standard. The uncertainty which had existed among business men disappeared. The tariff brought money into the Treasury, and prosperity was reëstablished.

1900. An act was passed (March 14) declaring the gold dollar the standard unit of value, and affirming the intention of the government to maintain all other forms of money at a parity with this standard.

Since 1900 there has been continued increase in the production of gold. Prices have risen in consequence. This fact deprived the Bimetallists of one of their main arguments, viz., that the demonetization of silver reduced the supply of money and brought about a fall in prices, to the detriment of all productive industries.

Such is a rapid sketch of bimetallism in the United States.

Nearly all the countries of the world have adopted the single gold standard. In many countries silver circulates as money, but it is as subsidiary coin reduced to mere token money.

The contest over bimetallism was fought for long years and with considerable bitterness. The popular vote in the election that sounded the death knell of bimetallism shows how nearly equally divided the country stood on the subject.

The following are the main arguments advanced by the opposing parties.

Arguments of the Bimetallists. — 1. Demonetization of silver deprived the people of one half the money available for productive purposes. 2. The contraction of money through the cutting off of silver was responsible for the downward trend of prices that occurred throughout the country after 1873. 3. An injustice was done to debtors who had to make payments on long-term contracts, through the appreciation of gold resulting from the smaller amount of money left in circulation upon the demonetization of silver. 4. Two standards as a measure of value are better than one. They would exert a mutually beneficial effect, and the fluctuations in the value of silver and gold would counterbalance each other. History was appealed to in order to show that from the year 1687 to the year 1873 the commercial ratio of gold and silver was never lower than 1 to 14.14 and never higher than 1 to 16.25. It was only after 1873 that any considerable change occurred in the ratio.

5. The United States should make use of the great amount of silver produced by the country and should take the lead in establishing free coinage of silver.

Arguments of the Monometallists. — The monometallists answered these arguments as follows: 1. The money needful for production was not materially decreased by the demonetization of silver. There was no falling off in the amount of money in circulation, as could be seen in the tables of statistics. Moreover, the growing use of instruments of credit had added to the medium of exchange. 2. The fall of prices that followed upon the demonetization of silver was due not so much to that fact as to the improved methods of production. 3. The debtors who might suffer through appreciated money were also consumers and had to pay less for commodities. 4. The theory of two standards was a delusion. There never was but one standard even under legalized bimetallism, and that standard was the cheaper metal. Our own and English experiences in the past were quoted as supplying facts in proof. 5. Europe would not follow the example of the United States should the United States adopt a bimetallic policy. Moreover, the present amount of money is sufficient for all commercial purposes, and there is no need of utilizing the silver produced in the country. This argument has been substantiated in recent years by the great increase of gold and the gradual rise in prices.

The prediction so loudly made by the advocates of silver upon the consummation of the so-called "crime of '73," that the country was rushing to its ruin, has fortunately not been fulfilled, and the question of national bimetallism has ceased to be of general interest. It is claimed, however, by many who would not advocate national bimetallism, that if by international agreement the principal nations should adopt the double standard, many advantages would follow from its adoption. Yet, gold monometallists point to the failure of every effort to secure any concerted action in this matter on the part of the principal nations. The international conferences of 1878, of 1881, of 1892, had no practical results.

QUESTIONS

1. What is bimetallism? Monometallism?
2. What are the kinds of bimetallism?
3. What is ratio? Legal ratio? Market ratio?
4. Give a short historical sketch of bimetallism in the United States.
5. What economic law is brought into prominence in the course of the historical sketch?
6. What were the main arguments used by the bimetallists? By the monometallists?

CHAPTER VIII

INFLATION AND CONTRACTION. DEPRECIATION. MULTIPLE TENDER

I. Inflation and Contraction

Inflation. — As has already been mentioned, a certain amount of money is needed in a state to carry on all its commercial transactions. There should be no more and no less than is needed for this purpose. But it may happen that the amount of money in circulation will be far greater than is needed for commercial exchanges. In that case there will be inflation and inflated prices.

The value of money depending inversely on the supply, when the supply is greater than needed, the value of money will decrease, and, as a consequence, the prices of commodities will rise.

This increase of the amount of money beyond the commercial need may happen in various ways: —

1. There may be an increased output of gold and silver from the mines; the metal so mined may be coined by the government and thrown into circulation.

2. The government may give legal tender power to silver coins, coined at a ratio that gives them a smaller bullion value than gold coins. Much of our silver money has been coined under such conditions. The silver dollar has 371.25 grains of pure silver, worth by weight about 50 cents. The government can buy for about 50 cents 371.25 grains of silver and coin it into a silver dollar having the legal tender value of 100 cents. The government makes nearly 50 cents on

each dollar. The temptation for a government to make such profits from its mints has sometimes been very great, and when the government yields to the temptation and does so, it may overstock the money market. The result will be inflation, a depreciation of money, and a rapid rise in prices.

3. Again, the government may issue paper money and give it legal tender power. This was done by the United States during the Civil War. One issue of "greenbacks" succeeded another, until the amount of paper money on the market was enormous, with the result that a paper dollar was worth only about 50 cents, as compared to gold. There was inflation, and there resulted the high prices of the war time.

4. Trade depression may follow on a period of commercial activity, and the stock of money may be greater than is needed.

Inflation always works injustice to creditors on long-term contracts, whereas it is advantageous to debtors. Thus, if Smith owes Brown $1000 in 1860, said amount to be paid five years later, Smith may discharge his debt in 1865 by the payment of 1000 paper dollars, since they are legal tender. But Brown practically receives but $500, because of the depreciated value of the paper dollar, equal to but one half the value of the dollar at the time the debt was contracted.

Contraction. — When there is less money in circulation than is needed for the commercial exchanges of the country, there is contraction. This may also be brought about through various causes: —

1. The output from the gold and silver mines may be reduced.

2. A certain amount of coin and bullion is lost through accident and abrasion, and the stock may not be replenished.

3. Commercial activity may increase proportionately more than the increase of money.

The effect of each of these causes may be that there will be less money in circulation than is needed. The scarcity of money will produce an appreciation of money, *i.e.* money will have more value. The result will be a fall in prices.

Just as inflation works injustice to the creditor class, so con-

traction will work injustice to the debtor class in long-term contracts. Thus, if Smith owes Brown $1000, a debt entered into before contraction, and pays him in the appreciated money of the period of contraction, he practically pays more than the amount originally called for.

Effects on Productive Industries. — The variation in money values has an important effect on productive industries. A great part of the money invested in business is borrowed capital. If a contraction is foreseen, producers will refuse to borrow, because of the greater amount they will have to pay their creditors, or, if they do borrow, they will be forced to produce a greater amount of commodities in order to be able to pay their debts. All this will have the effect of restricting production.

Our history furnishes an instance of contraction in the years 1873–1879. It was due principally to the endeavor of the government to pay off the principal of the debt incurred in the Civil War. Between 1869 and 1873, bonds to the value of hundreds of millions of dollars were redeemed. "When the crop-moving period came, a sharp stringency in money manifested itself, a severe panic involving a large number of important concerns and spreading over the entire country followed." (Hepburn, *Contest for Sound Money*, p. 221.)

In this instance, contraction "brought a period of falling prices extending over all sorts of commodities, and continuing almost uninterruptedly for seven years, with the effect of checking production and causing apprehension and great caution, with frequent closing of large factories and workshops, some suffering, and much agitation among wage earners." (Denslow, *Principles of Economic Philosophy*, p. 390.)

While some claim that inflation and a rise in prices will prove beneficial to productive industries, because there will be a greater amount of money for investment, yet it must be observed that rising prices have the effect of stimulating speculation. New enterprises will be established, some wisely, some unwisely. There will be overproduction of certain commodities. Business failures result. Failures are a necessary concomitant of

commercial enterprises, but inflation intensifies the forces which tend to bring them about.

The following table gives the commercial failures that occurred in the United States since 1899: —

Year	Failures	Liabilities
1899	9,337	90,879,889
1900	10,774	138,495,673
1901	11,002	113,092,376
1902	11,615	117,476,769
1903	12,069	155,444,185
1904	12,199	144,202,311
1905	11,520	102,676,172
1906	10,682	119,201,515
1907	11,725	197,385,225
1908	15,690	222,315,684
1909	12,924	154,603,465
1910	12,652	201,757,097
1911	13,441	191,061,665
1912	15,452	203,117,391

(Statistical Abstract of U. S. Dep't Com. & Labor, 1912, p. 705.)

Crises. — Inflation and contraction may be the causes of financial crises. A financial crisis is a violent state of unrest in a financial center, causing restriction of credit, and the failure of merchants and bankers. The financial crisis that occurred in the United States in 1837 and that also of 1857 were due to inflation of the currency through the immense issues of state bank notes. These notes became greatly depreciated in value, as we have already seen. The effects produced in both crises were great prostration of business, the cessation of manufactures and agriculture, and much suffering among the laboring classes. (Cf. Denslow, *Principles of Economic Philosophy*, pp. 382, 385.)

The crisis of 1873 was due to contraction. Says Denslow (p. 390), in speaking of this crisis: "The causes were national, and grew out of a large contraction in the volume of transferable

credits, occasioned partly by the policy of rapidly paying off the principal of the United States war debt, and partly by the fall in the value of silver relatively to gold, which set in in 1873, and culminated in the spring of 1876."

The crises of 1893 and of 1907 were also due to contraction. The former was brought about by the disappearance of gold from the country through the disturbing influence of the silver agitation. The latter was brought on by many remote causes, all no doubt affecting the situation in various degrees, but the immediate causes were the withdrawal of deposits, the hoarding of money, the inability of banks to continue bank credits, and the inelasticity of the currency system in use.

Remedy in Long-Term Contracts. — To remedy the evils to creditors and debtors resulting from the fluctuation of the monetary value, several plans have been suggested. Two of them are as follows: —

1. The government should so regulate the amount of money in circulation that there would be a general level of prices.

2. The contracts should stipulate that the amount of money called for shall be determined by the value of money at the time of payment, and shall be greater or less according as there is a depreciation or an appreciation of money. The fact of depreciation or appreciation will be found by taking the sum of the prices of one hundred different commodities at the time of making the contract and of payment, comparing the two sums, and arriving at a tabular unit. This plan is more fully stated on pages 157–158.

Some believe that the difficulty would be obviated if some staple which does not vary in value as much as money should be taken as the standard in which to pay long-term contracts. Such a staple is grain. The fluctuations in the price of grain have been much less than the fluctuations of gold and silver during the past centuries. As a matter of fact, Oxford University for centuries has received and does still receive its rental from its lands in grain valuation. Hitherto no plan has actually been adopted.

II. Depreciation of Money

Explanation of Depreciation. — It will be interesting to devote some time to the study of the historical course through which the precious metals have passed from the pre-Christian period down to our own times. Through this inquiry, we shall be the better brought to understand the relation that exists between metallic money and prices.

Gold and silver are not the only metals that could serve as a measure of value. Platinum has many qualities which render it suitable for a money metal, and between 1828 and 1845 the Emperor of Russia sought to introduce it into use. But the plans were found to be impracticable, because of the difficulty of turning platinum coin into ingots and platinum ingots into coin as might be required by exchange. (Walker, *Money, Trade, and Industry*, p. 24.)

Radium might be taken as a measure of value. A definite weight of radium would have an enormously greater purchasing power than a like weight of gold. To-day an ounce of radium is estimated at a value of some hundreds of thousands of dollars. The reason of this value is the scarcity of the metal and the extreme difficulty of producing it. If we were to calculate the value of all commodities in radium, all commodities would have a certain value far inferior to their present value as estimated in gold. An article worth an ounce of gold would be worth only a small fraction of an ounce of radium. But we can conceive that the production of radium could be made more easy, and that the amount of the metal in existence might be increased. As its amount increased, there would be a change in the relative values of all commodities when estimated in radium value. The greater the supply of the metal, the less value an ounce of it would have, and the fewer units of any commodity it would purchase. Its purchasing power would be less.

The same may be conceived of diamonds. These, because of their relative scarcity and the difficulty of procuring them, might be made the measure of all values, and all things might

be computed in diamond value. But, if diamonds should increase in number, if some process were found by which they might be produced in great abundance, it is clear that the value of diamonds would decrease, and the value of all other things rated in diamond value would increase.

Now, what would occur in these imaginary but readily conceivable cases of radium and diamonds, is what really has occurred in the case of gold and silver, the actual standards of prices for many hundred years. This will become evident by a rapid survey of the history of the precious metals.

Historical Sketch of the Precious Metals. — The amount of precious metals in the world at the period of the Roman Empire was very great. In the third and fourth centuries before the Christian era, " more gold and silver were in the hands of men than all Europe possessed at the beginning of the eighteenth century after Christ." (Walker, *Money, Trade, and Industry*, p. 107.)

This fact is explained by the manner in which gold and silver were acquired. Mines were owned by the sovereigns, and they were worked solely for the benefit of the sovereigns. The mining class was composed of slaves, who formed so numerous a part of the various peoples at that time, of convicts, and of captives taken in war.

The immense masses of precious metals produced by these laborers were at first stored away in the treasuries of the princes, to be dispensed by them as gifts and largesses to whom they liked, and thus gradually to find their way into circulation among the people.

Again, another great source of the metals existed in the right of the victor in war to carry off all the wealth he could lay his hands on, and history furnishes countless instances of great treasures in gold and silver that passed into the possession of the successful invader. Alexander seized at Persepolis, according to Diodorus, treasure to the value of $135,000,000. Every Roman triumph was graced by the display of gold and silver wealth obtained in conquest.

As Rome finally became the mistress of the world, much of the wealth of the world naturally found its way to the Roman capital. Hence, the wealth of Rome became enormous. Gold and silver flowed like streams in Roman streets.

Under Roman rule, however, the working of the mines was carried on in a haphazard, reckless, wasteful way, and the production of gold and silver declined. The mines were leased out to "farmers," who worked them for their own advantage, using every endeavor to enrich themselves as much as possible in the brief period during which they held possession. Only the best ores were taken out, and the mines were left in a deplorable condition for succeeding workers. (Cf. Walker, *Money, Trade, and Industry*, p. 112.)

In the fifth century, the vast hordes of Teutons swept down upon the Roman Empire, and that great fabric tottered and fell. One of the first effects of these invasions was to cut off the supply of precious metals from the mines, and ultimately to destroy almost wholly the art of mining, of which the barbarian invaders were ignorant. The mines fell into disuse, and mining practically ceased throughout the Roman Empire. The use of gold and silver gradually ceased, the existing stock of the metals becoming exhausted, and there set in the great famine in the precious metals which lasted until the close of the Middle Ages.

Alison, the historian, has an interesting passage showing his belief in the connection between the fall of the Roman Empire and the withdrawal of gold and silver from circulation. He says: "The fall of the Roman Empire, so long ascribed, in ignorance, to slavery, heathenism, and moral corruption, was in reality brought about by the decline in the gold and silver mines of Spain and Greece, from which the precious metals for the circulation of the world were drawn at the very time when the victories of the legions and the wisdom of the Antonines had given peace and security, and with it increase in numbers and riches, to the Roman Empire." (In Walker, *Ib.*, p. 114.)

Upon this passage of Alison, Walker remarks: "Doubtless this claim is far too large. Causes distinctly political and social

had to do with the downfall of that mighty fabric of military enterprise, legislative wisdom, and administrative skill; but it seems to me that there cannot be an intelligent doubt that the steady rise in the value of money, due to its increasing scarcity. contributed greatly to the impoverishment of the people, the decay of commercial enterprise, and the abandonment of agricultural lands, which sapped the foundations of the Roman Empire." (Walker, *Ib.*)

The mining of the precious metals practically ceased in the world until towards the end of the Middle Ages, when it was taken up in Austria, Hungary, and Germany. Prices were at a low level.

Then came the discovery of America, and in 1545 the South American mines began to pour into Europe a vast amount of silver, and, as it came into circulation, gradually prices rose.

After the year 1700, the gold mines of Brazil began to add to the stock of money, and later in the same century Mexico added still more from its silver mines, so that from 1600 to 1800 prices rose three or four hundred per cent.

In 1848, gold was discovered in California, in 1851 in Australia, and still greater amounts of gold were poured into circulation, still further affecting prices.

Thus gradually the precious metals, through this increase in their quantity, have depreciated in value, and lessened perceptibly in their purchasing power, and the values of all things estimated in money have as gradually risen.

World's Production of Gold and Silver. — While, in 1800, the average annual world's production of gold was 571,000 ounces, in 1860, the average annual production amounted to about 6,500,000 ounces. Since that time the annual production of gold and silver has been very great. Of late years, the new and improved methods adopted in mining have reduced the cost of production and have helped towards the increased output of the metals.

The following tables will show the world's production of gold and silver: —

WORLD'S PRODUCTION OF GOLD

	Ounces	Value	Average Annual Production	
			Ounces	Value
1861–1870 . .	61,098,340	$1,263,015,000	6,109,834	$126,301,500
1871–1880 . .	51,643,149	1,067,559,600	5,164,315	106,755,960
1881–1890 . .	52,005,568	1,075,050,500	5,200,557	107,505,050
1891–1900 . .	101,647,521	2,101,240,900	10,164,752	210,124,090
1901–1910 . .	182,892,523	3,780,364,000	18,289,252	378,036,400
1911 . .	22,348,313	461,980,500		
1912 . .	22,549,335	466,136,100		
1913 . .	22,249,596	459,939,900		
1914 . .	21,240,416	439,078,260		
1915 . .	22,674,568	468,724,918		
1916 . .	21,970,788	454,176,500		
1917 . .	20,289,546	419,422,100		
1918 . .	18,556,920	383,605,552		
1919 . .	17,664,910	365,166,077		

(Stat. Abstr. U. S., 1920, p. 823.)

WORLD'S PRODUCTION OF SILVER

	Ounces	Coining Value	Average Annual Production	
			Ounces	Coining Value
1861–1870 . .	392,267,775	$ 507,175,000	39,226,778	$50,717,500
1871–1880 . .	660,460,975	853,928,500	66,046,098	85,392,850
1881–1890 . .	972,402,901	1,257,248,200	97,240,290	125,724,820
1891–1900 . .	1,616,673,178	2,089,856,000	161,667,318	208,985,600
1901–1910 . .	1,826,226,572	2,361,181,800	182,622,657	236,118,180
1911 . .	226,192,923	292,451,500		
1912 . .	224,310,654	290,017,800		
1913 . .	223,907,843	289,497,000		
1914 . .	168,452,942	217,797,743		
1915 . .	184,204,745	238,163,710		
1916 . .	168,843,000	218,302,060		
1917 . .	174,187,800	225,212,509		
1918 . .	198,168,408	256,217,739		
1919 . .	174,517,414	225,638,677		

(Stat. Abstr. U. S., 1920, p. 823.)

From all that has been said, it will be gathered that there has been an enormous increase in the precious metals, with the result that money has considerably depreciated. With the access of the metals, their value has diminished, and consequently prices in general have risen.

Money had a far higher purchasing power in past centuries, and with every increase of the metals, their purchasing power has lessened. And the prospect is that this depreciation of money will go on indefinitely. New mines will be opened, new stores of the metals will be discovered, and the demand, although increased by the growth of population and the extension of exchange, will not keep pace with the supply.

Effect of Depreciation on Society. — Now, it may be asked: Is this constant depreciation of money a benefit or an evil?

To many economists it appears in the light of a benefit to society, because the good effects resulting from depreciation reach directly that large portion of society which is engaged in production and indirectly all the consumers as well, while the evils of depreciation develop only by the slow process of the evolution of economic laws. (Cf. Walker, *Money, Trade, and Industry*, p. 79. Cf. Denslow, *Principles of Economic Philosophy*, p. 360.)

There can be no doubt that a rise in prices has the effect of giving a stimulus to production. New enterprises are entered into, more capital is invested in existing and new projects, money that is tied up in bonds and other investments which pay comparatively small interest will preferably be invested in business ventures where the profits are greater.

The increase of productive industries brings about a greater demand for labor, and results in the betterment of the wage-earning portion of society. The rate of interest on money is reduced, because of the abundance of money obtainable on demand. The burden of taxes is diminished, at least in so far as taxes go to pay the interest or principal of public debts.

A new impetus is given to business. There is in every community an ever-watchful class who are intent on employing

every scheme for the increase of wealth. As Newmarch has it: "There is at all times a profusion of enterprises to be undertaken, of experiments to be tried, of schemes to be worked out, of improvements to be made, of ingenious men to be set up with capital, of trade already profitable to be made more so by vast extensions." (In Walker, *Money, Trade, and Industry*, p. 85.)

Now, there are three classes of society which help onward the great tide of production: the capitalist, who furnishes the capital; the laborer, who furnishes the labor; and the business man or promoter or captain of industry.

It is the last mentioned who, possessed of technical skill, directive and administrative ability, and commercial knowledge, puts the capital to its best use and employs the labor of the workman to the greatest profit.

The man of business is incited to an increase of energy by the hope of profits, and this hope of profits exists when there is a rise in prices, consequent on the increased supply and the accompanying depreciation of money.

It may be said that the prices of all articles employed in production will rise together with the rise of the prices of products, and hence the profits of the producers will not be appreciably increased. But it must be observed that the rise in prices is not spontaneous throughout, nor will it reach the raw materials of production until some time has elapsed. In the meantime, the chance to make increased profits exists and will be incentive enough to the producers to induce them to apply themselves with greater activity to production. (Cf. Walker, *Money, Trade, and Industry*, p. 97.)

Finally, the depreciation of money and the rise in prices is favorable to the whole debtor class. All who owe debts may pay their debts in the depreciated money and thus have remitted a portion of their indebtedness. The creditor class will suffer, and this class embraces a great portion of society.

As Walker says, the creditor class is composed of all "owners of capital who are not also employers of labor." And he proceeds to enumerate the several members of the class:—

1. Those who by age, sex, or infirmity are disabled from active occupation; retired business men; pensioners, annuitants.

2. Those who live on their incomes.

3. Professional men who are not engaged in commercial business.

4. The laboring class in so far as they save and deposit their savings in banks.

All these are capitalists in the broad sense of the word, and rank as creditors, together with those who are owed money by others for commercial goods transferred. These creditors furnish much of the capital that is used in business. Returns must be made to them for the use of this capital by those who form the great debtor class of society, viz., the business men who are the employers of labor. These returns, which form the revenues of the capitalist class, will be decreased by the depreciation of money, whereas the business men, the debtors, find their debts lessened by the same cause.

The reasons advanced by those who regard this fact as a boon to society in general are various.

The capitalist class is better able to suffer the loss than others.

Those who belong to that class should feel that they are parasites, and should endeavor to take a more active part in the upbuilding of the prosperity of their country. (Cf. Gide, *Principles of Political Economy*, p. 231.)

It is not right that the present generation, the debtors, should bear all the undiminished claims of the past, the creditors.

When it is asserted, then, that the creditor class will suffer by this depreciation of money, and that they will receive but a portion of what is justly their due, it may be pointed out that the depreciation, as it has been under discussion, is brought about not by any act of government, "not by confiscation and repudiation, the work of man, carrying with it the sting of injustice, and bringing retribution after it, but by a purely natural process, in the discovery of new stores of the precious metals, or through improvements in the chemical and mechanical arts

of mining." (Chevalier, in Walker, *Money, Trade, and Industry*, p. 96.) It is brought about by natural causes, having influence on prices similar to the influence on business exerted by the introduction of machinery, by the opening up of new markets, and other such causes which form part of the onward progress of mankind in commercial pursuits. Moreover, the causes in the present instance work only very gradually, and extend their operation over long periods of time, and thus produce their effect without any very sudden or severe shock.

Instances in History of Great Increase of Money. — There have been two instances in history of a great inflow of the precious metals on the world, with a consequent notable depreciation in the value of money and a rise in prices.

The first took place in Europe in 1570–1640, upon the discovery of the New World, when vast silver mines were found in South America. It took some time before the metal, shipped by way of Spain, could reach the marts of Europe and be distributed so as to exert an influence on trade and prices. The effects of this flood of metallic money upon the world were very great, because of the small amount of money then in existence. The evils of depreciation were intensified because of the suddenness and the greatness of the increase of money. But the beneficial effects were no less marked. New life and energy were injected into the cultivation of land by the prospect of the gain the higher prices afforded. Productive industries awoke from the lethargy in which they had long reposed. The maritime power of England sprang into existence, oriental trade expanded, and the whole of society received a new impetus that was to carry it far in commercial development. (Cf. Walker, *Money, Trade, and Industry*, p. 102.)

The second instance was the discovery of gold in California and Australia, in the years 1848 and 1851 respectively. This increase of money did not produce so marked a change as did the former, because the amount of existing money was already great, and the new increase, though large, produced but a comparatively slight effect.

III. Multiple Tender

Money as a Standard of Deferred Payments. — The question just discussed will make manifest the inherent defect of the precious metals as money. As we have seen, there are three functions of money. It serves as a medium of exchange, a measure of value, and a standard of deferred payments.

While the metals perform well the first two functions, they fulfill but very inadequately the third function, viz., that of serving as a standard of deferred payments.

A person who receives $1000 in 1860, and cancels his debt in 1900 by paying $1000 in the lawful money of the country, does not pay to his creditor the full value of the money he received in 1860. The purchasing power of the $1000 is not the same in 1900 as it was in 1860, because of the depreciation money has undergone during the intervening forty years.

The creditor is made to suffer great hardship by this changeableness in the value of money. One can easily see what a loss would be suffered by a creditor who in 1560 had loaned $100, and at the end of twenty years received back merely his $100 in metal money. In the interim, metallic money had depreciated nearly two thirds in value.

To come nearer our own times, it has been computed by Stanley Jevons that the value of gold fell 46 per cent between 1789 and 1809; from 1809 to 1849 it rose 145 per cent, and between 1849 and 1874 it fell again at least 20 per cent. (Walker, *Money, Trade, and Industry*, p. 68.) Contracts extending over such periods would, it is evident, be very materially affected by these fluctuations in money value.

Remedy Proposed: Multiple Tender. — No remedy has yet been adopted to avoid the undeserved losses which result from the changes in the value of the precious metals through long periods of time. A scheme suggested by Lowe and Scrope in England, and Count Soden and Professor Roscher in Germany, would, in the opinion of such men as Jevons and Walker, prove satisfactory in long-term contracts.

It consists in taking, at the two moments of making and settling the contracts, the sum of the prices of a large number of articles of general consumption and of general necessity for life. The sum taken at the first moment, that of making the contract, would furnish a first unit. The sum taken at the second moment, that of settling the contract, would furnish a second unit. These units will represent the value of money at the two periods.

Thus, the articles selected may sum up $10 at the first period; the same articles may sum up $12 at the second period. The figures 10 and 12 are the tabular units of the two periods. Now, suppose a parcel of land was bought at the first period at a price of $6000. This would mean 600 units. When the second period had come and payment was to be made, the tabular unit is found to be 12, and 600 times this unit will make $7200, the creditor's price for the land at the moment of payment.

This method could be carried out if the government would appoint commissioners to make up the tabular units at the different periods. It would prove too cumbersome if applied to short periods of not more than three months' duration, as Jevons would have it applied, but if, as Walker recommends, it were applied to comparatively long periods, it would do away with a great amount of injustice unwittingly done to-day to the creditor class through the depreciation of money values.

Walker says: "In the permanent investments of property not the least inconvenience would be encountered by the scheme of a Multiple Tender, which might be extended to the cases of all who have definitely retired from active life, carrying away with them all they will ever have to support old age and provide for their children; to the cases of trustees and guardians, under a solemn responsibility in the care of estates, where loss is more to be dreaded than gain to be desired; to the cases of institutions whose funds are sequestered from the stock of active capital for pious and charitable uses. The funds of savings banks might be put under the same safeguard, and government loans might also be issued in terms of the Multiple Tender." (*Ib.*, p. 76.)

QUESTIONS

1. What is inflation? How may it be brought about? How does it work injustice to creditors? Give an example.
2. What is contraction? How may it be brought about? How does it work injustice to debtors? Give an example.
3. What are the effects produced on productive industries by inflation and contraction? How does inflation stimulate speculation? Illustrate by an example.
4. How do you account for the large numbers of yearly failures?
5. What is a financial crisis? How do inflation and contraction bring about financial crises?
6. What remedy is suggested for the injustice done debtors and creditors through the fluctuations of money?
7. Give a brief historical sketch of the precious metals.
8. To what is due the constant increase of gold and silver production since 1890?
9. Is depreciation of money an advantage or a disadvantage to society in general?
10. Who constitute the creditor class in society?
11. Give instances in history of a great increase of money.
12. What is the defect of metallic money? What remedy is suggested?

CHAPTER IX

CREDIT

Definition. — Hitherto we have considered metallic money as a means of effecting the various exchanges of commerce. Besides metallic money, however, there are other means of carrying on exchanges. These are the various instruments of credit.

Credit is defined as "the power to secure commodities or services at the present time in return for some equivalent promised at a future time." (Bullock, *Introduction to the Study of Economics*, p. 264.)

A man has credit whose standing is such that others are convinced that future payments will be made by him for present goods received. Credit replaces money, and saves the actual handling and passing of money with all the inconveniences attendant upon such transactions.

Instruments of Credit. — The instruments of credit are of several kinds, including Book Credits, Promissory Notes, Checks, Bank Notes, and Bills of Exchange (*Ib.*, p. 264).

1. **Book Credit.** — Book credit is a system by which two merchants having dealings with each other, instead of immediately paying cash for their purchases, enter these purchases in their books, and at the end of a certain time balance accounts, when he who is found to be in debt to the other settles his account and pays the balance. For example, A buys from B, from time to time, to the amount of $100, and B buys from A to the amount of $95. The accounts run on for a month, we may suppose, and at the end of that time they are made up, and A pays to B $5, the only actual money which passes between them.

2. Promissory Notes. — A promissory note is a written promise to pay on demand or at a specified time. The creditor may indorse the note and pass it to a third person, who also may indorse it and pass it to another, and thus the note may effect many exchanges before it is finally presented for payment.

3. Checks. — "A check is an order drawn by an individual or company upon a bank ordering the payment of a certain sum of money to the order of a person named, or to the bearer of the check."

He who draws a check must have some money on deposit in the bank upon which he draws the check. If the drawer of a check and the drawee have accounts in the same bank, the bookkeeper of the bank, if the drawee deposits the check, credits his account with the amount of it, and deducts the same amount from the account of the drawer.

An immense amount of business is done by the check system. There are in the United States about 20,000 commercial banks, each having its own check blanks distributed among the depositors. Checks are drawn each day on each of these banks. Each bank will receive on deposit checks drawn on any other bank if it is in good standing.

The bank which pays out $100 on a check can present that check to the bank on which it is drawn and have the amount paid refunded. This, however, is not the method adopted. Much time and trouble are saved by what is known as the Clearing House.

The clearing house is an institution formed by a number of banks for the purpose of settling accounts between them, through the canceling of checks and the payment of money balances. Every important city has a clearing house. The commercial banks of the city belong to the institution, and any city bank may become the representative of other banks situated in the neighboring country towns too far distant to attend the daily meetings of the clearing house.

The clearing house meets daily and transacts a vast amount of business in a very short time. Here take place the presenta-

tion of the checks drawn on the different banks, the balancing of the amounts stated in the checks, and the final money settlement of the balances due each bank from the others.

In 1920, there were 199 clearing house associations in the United States, and their aggregate clearings in that year reached 462 billions of dollars. (Report Comptr. Cur., 1920, p. 280.)

The New York Clearing House was established in 1854. In 1920 there were 55 banks belonging to the Clearing House Association of New York. The clearings for that year amounted to $252,338,249,466. The balances paid in money amounted to $25,216,212,386 or 9.99 per cent of the clearings. Thus, in that year, over $227,000,000,000 were checked off between the banks, obviating the need of transporting so much actual money. The average daily clearings during that year, 1920, amounted to $830,060,031, and the average daily balances paid in money to $82,948,067, thus saving the daily transfer of over $747,000,000 in actual money. The need and the advantages of the clearing house system are obvious. (Cf. Report Comptr. Cur., 1920, p. 281. Cf. Horace White, Money and Banking, p. 239, for an account of the working of the clearing house system.)

4. Bank Notes. — A bank note is a paper note issued by a bank on the strength of a certain amount of reserve specie held by the bank. Such notes pass instead of metallic money, and serve all the purposes of money. They are exchangeable for coin at the demand of the holder. They are discussed further in the chapter on Banks and Banking.

5. Bills of Exchange or Drafts. — A bill of exchange or draft is a written order by which the person drawing the bill orders a second person, against whom he has a claim, to pay a certain sum of money at a specified time to a third person. The bill is payable at sight, or after a period indicated in days, — thirty, sixty, or ninety. The bill is said to be mature when the time limit for payment is reached.

Exchange is Domestic or Foreign.

Domestic exchange occurs within the country; foreign exchange takes place between different countries. Bills of ex-

change are practically the same whether made out in domestic or in foreign exchange.

Kinds of Bills of Exchange. — Foreign bills of exchange are of two kinds: commercial bills, which are drawn against some commodity that has been sold, and bankers' bills, which are drawn against a bank credit acquired by the deposit of a commercial bill or some other security in a bank for the purpose of securing foreign payments.

Commercial bills of exchange are usually made payable after 30, 60, or 90 days. Bankers' bills of exchange are made payable after a term of days (60, 90), on demand, or by cable.

Use of Bills of Exchange. — Bills of exchange constitute a system of credit which does away in great measure with the need of shipping coin in payment for purchases made in different countries. Indeed, foreign trade could hardly be carried on without this medium.

The United States, for example, imports yearly over one billion dollars' worth of goods. These imports represent purchases made by our merchants in foreign countries. If metallic money were the only kind of money in use in these import transactions, the United States would have to send abroad yearly over one billion dollars in coin. But this amount of coin does not exist in the country, and certainly is not to be found in the hands of the traders who carry on the import trade.

Bills of exchange take the place of coin, and accomplish all the purposes of money. They serve to cancel the greater proportion of the indebtedness that arises between two countries, and but a small proportion of coin is required for shipment to pay the balances of trade.

Origin and Function of Bills of Exchange. — Bills of exchange are drawn by the sellers of commodities against foreign purchasers. The creation of a commercial bill of exchange is as follows (see *Annals of the American Academy of Political and Social Science*, Nov., 1910, p. 16):

A New York dealer in some home manufacture sells $1000 worth of goods to an English firm in London. The goods are

duly shipped to the English firm, and a bill of lading is obtained by the New York merchant as a voucher for the genuineness of the transaction. Thereupon, the New York merchant makes out a bill of exchange, an order on the London firm to pay after 90 days the sum of $1000, plus the expenses of insurance and freightage which may be incurred in the transit of the goods to their destination. The bill is a New York bill drawn on London and payable in London when it matures.

The New York merchant may present his bill of exchange together with the bill of lading to a New York banker, and have it cashed to the full face value of the bill less the banker's commission and the discount.

The New York merchant thus receives immediate payment for his goods, and, as far as he is concerned, the sale is completed. He has received immediate cash for his sale. If he had to wait until the money was returned to him from his foreign purchaser, much of his capital would be tied up and would not be available for business.

The bill is now in the hands of the New York banker. He may send it to his correspondent in London, who will present it to the English firm for payment or acceptance. The bill may be paid at once by the English firm, or it may be kept by the London banker until it matures. When it is finally paid, the bill is withdrawn from the market. It has fulfilled its purpose and has saved the transmission of coin from one country to another.

Or, the bill, instead of being sent on to London by the New York banker who has bought it from the New York merchant, may be retained by the New York banker and may fulfill a further purpose.

A New York importer purchases $1000 worth of goods from a London firm. He could pay for the purchase by sending to the London firm the value of the goods in coin. This, however, would entail much inconvenience and expense. Instead, he goes to the New York banker mentioned above and buys from him the bill of exchange made out by the New York merchant

and drawn on London. He gets the bill at the current rate of exchange upon paying the banker's commission. He sends this bill to the London firm in payment of his purchase. The bill is received by the London firm, which will collect at maturity from the other London firm against which the bill is drawn. The bill has thus fulfilled a double function and has canceled indebtedness in two international transactions.

The bill we have followed is one in a hundred thousand that originate after a similar fashion. The bills accumulate in the hands of bankers who make it a business to deal in foreign exchange. In every great banking house there are hundreds of bills of exchange drawn on all places in the world. Thus, a banker in Boston will have bills on London, Hamburg, Amsterdam, Paris, Lisbon, Madrid, Vienna, etc. These bills originate in the manner just explained. Merchants in Boston sell goods to merchants in all those several cities mentioned. They draw bills of exchange on the foreign merchants, just as a man might draw his check on a bank which holds his money in deposit. They may present these bills to their bankers and get the face value of the bills less the bank discount.

Now, if the Boston merchants do so in 1000 transactions, there will be 1000 bills of exchange in the hands of Boston bankers on those foreign cities. If they do so in 100,000 transactions, there will be 100,000 bills of exchange in the hands of the Boston bankers. Thus the bills accumulate.

The bankers sell these bills to those who want to pay their debts abroad. If a Boston merchant has bought goods in London, Hamburg, Paris, Lisbon, he owes the merchants in those cities. It is much easier to buy bills of exchange on those foreign cities and mail them across the ocean than to pay these debts with actual coin. This is what the merchant does.

Since London is the clearing house of the world, the bills of exchange for sales in every city of Europe may be drawn payable in London, and these bills may be sent by American purchasers to the foreign merchants in payment for their purchases, whichever may be the city in which these foreign

merchants are located. Such bills are called indirect bills of exchange.

As the commercial transactions between different countries are of great variety and for every conceivable amount, it is practically always possible, especially in large centers, to obtain bills covering the amount of any indebtedness.

Rate of Exchange. — Many bankers and exchange brokers make a business of dealing in bills of exchange. They buy them from the merchants who have sold goods to foreign purchasers, and sell them again to merchants who seek this means of paying their foreign debts.

The price paid for the bills will be less than the face value of the bills by the amount of the banker's commission. This commission is very small for individual bills, but makes a large total when the business of exchange is very great, and constitutes one of the sources of profit for the bankers.

The price paid for a bill of exchange will depend, moreover, on the condition of exchange between different countries. Gold, the money of exchange, has not the same value in different countries. Its value will vary, depending, among other things, on the relative amount of money in the different countries, and this will depend on the balance of trade and the balance of accounts. Hence arises what is called the Rate of Exchange, which may be described as the figure at which home money will exchange for foreign money.

Thus, there will be a rate of exchange between the United States and England, France, Germany, Holland, and all other countries with which the United States has commercial dealings, and the amount of United States money required at any one time to buy a pound sterling, a franc, a mark, a guilder, etc., will be the rate of exchange in the United States with the several countries at that time.

The rate of exchange has reference to bills of exchange. It may be found quoted daily in the newspapers.

The rate of exchange may be at par, above par, or below par. The par of exchange is determined by the government in order

to have a definite figure for use in Custom House transactions. It indicates the actual value in United States money of the units of the moneys of account of the different countries. Thus,

The English pound sterling	=	$4.8665	
The French franc	=	.193	($1 = 5.18⅛ francs).
The German reichsmark	=	.238	(4 marks = .952 cents).
The Holland guilder	=	.402	

(N.B. In quotations of French exchange, the figure gives the number of francs that will exchange for one dollar United States money. In quotations of German exchange, the equivalent of four marks in United States money is given.)

When the figures quoted for foreign exchange are above these figures, the rate of exchange is above par in the United States; when below, it is below par in the United States.

Factors determining Rate of Exchange. — It will be noticed that the rate may change day after day. There are various factors which determine the rate. They are principally the three following: —

1. The time of the bill. Suppose a New York merchant has to pay a debt in London of £100 for goods received. He goes to a broker and buys a bill of exchange on London for £100. The broker may have a short bill of exchange, *i.e.* one that will mature say in ten days, and for that bill he will demand $4.86½ to the pound sterling, so that the merchant will have to pay 100 times $4.86½, or $486.50 for the £100. Again, the broker may have a long bill of exchange, *i.e.* one that will not mature before ninety days, and for this he will demand $4.84½ to the pound sterling, so that the merchant will pay 100 times $4.84½, or $484.50 for the £100.

The difference in the exchange rate depends here on the quickness with which cash can be got on the bill. The 10-day bill can be converted into cash in 10 days; the 90-day bill, not for three months.

The shorter the time before the bill matures, the higher the price of the bill. Brokers can increase their profits considerably

by buying long bills from the drawers and holding them until near the time of maturity, when they can sell them at a much higher rate.

2. The credit of the drawer of the bill. The price which a merchant will pay for a bill of exchange will be higher the greater the credit and the more secure the standing of the drawer of the bill. The drawer may have to make good the value of the bill, and the higher his rating in the business world, the greater certainty is there that the ultimate payment of the bill will not be defaulted. Hence the higher rate demanded for bills drawn by persons or firms of great business credit.

3. The supply and demand of bills. Bills of exchange accumulate rapidly in the different business centers of a country. There is also a constant demand for bills of exchange. But these two factors, supply and demand, are constantly changing, and the rate of exchange will vary with the factors.

If, for instance, there are 5000 bills of exchange in Boston on London, and Boston merchants desire 10,000 such bills, the demand will exceed the supply, and as a consequence the rate will rise. On the other hand, if there are 10,000 bills of exchange and a demand for only 5000, the supply will exceed the demand and the rate will fall.

The supply and demand of bills will depend on the relation of exports and imports. When the exports exceed the imports, there are more sales than purchases, consequently more credits than debts, consequently a surplus of bills. When, however, the imports exceed the exports, there are more purchases than sales, consequently more debts than credits, and consequently a deficit of bills. In the former case, exchange will be below par; in the latter case, exchange will be above par.

Favorable and Unfavorable Rate of Exchange. — When in any country the bills of exchange on foreign countries are quoted above par, the exchange is said to be unfavorable to that country. When in any country the bills of exchange on foreign countries are quoted below par, the exchange is said to be favorable to that country. To illustrate: —

England	United States
500,000 sales;	500,000 purchases;
500,000 credits;	500,000 debts;
Result — 500,000 bills of exchange in England on United States.	
100,000 purchases;	100,000 sales;
100,000 debts;	100,000 credits;
Result — 100,000 bills of exchange in United States on England.	
Rate below par.	Rate above par.
Exports exceed Imports.	Imports exceed Exports.

In England, the rate of exchange with the United States is below par, and the exchange is favorable to England.

In the United States, the rate of exchange with England is above par, and the exchange is unfavorable to the United States. Here, debtors can pay only 100,000 debts to England by bills of exchange, because there are only 100,000 bills of exchange to be had. The remaining 400,000 debts will have to be paid by the export of gold. The rate of exchange in this instance would be very high.

The change from favorable to unfavorable exchange, as it is but temporary, does not denote any great peril or inconvenience. It has significance, however, for brokers, who must supply the gold for shipment.

Variation of Rate of Exchange. — The variation of the rate of exchange will turn above or below the par of exchange, but, ordinarily, it will vary above and below this figure by not more than $2\frac{1}{2}$ cents. There are two causes for this.

1. Merchants use bills of exchange because they are a cheaper and more convenient means of paying their foreign debts than would be the exporting of gold specie. The exporting of gold costs for freightage and insurance $2\frac{1}{2}$ cents per English pound. If the rate of exchange should rise to $4.8965, the United States debtors would find it cheaper to export gold specie than to buy a bill of exchange. Again, if the rate of exchange should fall to $4.8365, the United States creditors would find it more profitable to make their English debtors pay them in gold specie. The figures at which it would become more profitable to export gold than to buy exchange are called the "gold points."

2. If the United States merchant pays $486.65 for a £100 bill of exchange, and can sell the bill for $488 or $490, making a profit of two or three dollars on the hundred pounds, he will be led to increase his exports. Many other merchants will perceive the same advantage, and will increase their exports. The result will be that there will be an increase of bills of exchange, and a consequent fall in the rate.

This fact was noticed at the end of the Franco-Prussian war. Because of the immense payments France had to make to Germany, foreign paper in France was far above par, and the exports increased enormously for several years.

All that has been said about foreign exchange applies to domestic exchange. When exchange between cities is quoted at 25 cents premium or 25 cents discount, for example, it means that these sums must be added to or subtracted from every one thousand dollars exchanged between the cities. The condition of exchange between the large cities may be seen daily in the newspapers.

QUESTIONS

1. What is credit? What are the principal instruments of credit?
2. Explain the use of book credit, promissory notes, checks.
3. What is a clearing house? Give an account of the method followed in a clearing house. What is the advantage of a clearing house?
4. What are bank notes?
5. What is a bill of exchange? What is domestic exchange? Foreign exchange?
6. What are the different kinds of bills of exchange?
7. Explain the use of bills of exchange.
8. Describe the course of a bill of exchange from the moment it is made out to the time it is cashed. Who deal in bills of exchange?
9. What is rate of exchange? What is meant by par of exchange? How is it fixed?
10. What are the factors that determine the rate of exchange? Give examples to illustrate each factor.
11. What are favorable and unfavorable exchange? Illustrate.
12. What is meant by "gold points"? What will be the extent of the variation in the rate of exchange? Why?

CHAPTER X

BANKS AND BANKING

Definition. — Banking is a general term "applied to the business of dealing or trading in money, checks, drafts, promissory notes, bonds, mortgages, and other printed or written obligations for the payment of money or its equivalent." (Coffin, *A, B, C of Banking.*)

The business is done, like any other business, for the profit that can be made. The profit in the banking business is made through the interest charged on loans and through discounts on bills and collections.

A bank is "an institution for lending, borrowing, issuing, or caring for money." (*Standard Dictionary.*)

Kinds of Banks. — There are different kinds of banks, as follows: Federal Reserve Banks, National Banks, State Banks, Private Banks, Loan and Trust Companies, Savings Banks.

Federal Reserve Banks were created by the Federal Reserve Act, passed Dec. 23, 1913.

National Banks owe their origin to the National Bank Act of 1863.

State Banks are such as are incorporated under the laws of the several states.

Private Banks are banks organized by private individuals or corporations.

The four kinds of banks just mentioned are called commercial banks. They are so called because they assist the commercial transactions of merchants.

Loan and Trust Companies are a class of state corporations originally instituted to care for trust funds. They have usurped many of the operations of regular banking institutions.

Savings Banks are instituted to receive and care for deposits from the people. The deposits are invested and a rate of interest paid to depositors. The savings banks do not usually carry on any banking business in the strict sense of the term.

On June 30, 1920, the standing of the different kinds of banks was as follows: —

	Number	Capital	Deposits
National Banks . . .	8,019	$1,220,781,000	$13,705,325,000
State Banks	18,195	920,211,000	10,873,035,000
Savings Banks . . .	1,707	68,183,000*	6,536,596,000
Private Banks . . .	799†	13,334,000	169,573,000
Loan and Trust Cos. . .	1,408	475,745,000	6,085,675,000

* 1087 stock savings banks.
† Only one fourth of banks reporting. (Stat. Abstr. 1920.)

Organization and Nature. — (1) *Federal Reserve Banks.* — Under the Federal Reserve Act, passed Dec. 23, 1913, the continental territory of the United States is divided into twelve districts, which are known as "Federal Reserve Districts." In each district there is designated one city which is called a "Federal Reserve City." In each federal reserve city a central bank is organized which is known as the "Federal Reserve Bank of (naming city)."

A federal reserve bank must have a subscribed capital of not less than $4,000,000. The capital stock is divided into shares of $100, and is subscribed by member banks. The member banks of any federal reserve bank are all the national banks in that federal reserve district, together with any other banking institutions, within the district, that conform to the necessary requirements. State banks, private banks, and trust companies may become members by subscribing to the capital stock of the federal reserve bank. They thereupon come under the control of the Federal Reserve Board, the board that is in general charge of the federal reserve system.

Member banks must subscribe to the capital stock of the federal reserve bank in a sum equal to 6 per cent of their paid-up capital and surplus. One sixth of the subscription must be paid at the time of organization as a member bank, one sixth within three months, and one sixth within six months thereafter. The remainder of the subscription is subject to call when deemed necessary by the Federal Reserve Board. Should the subscriptions of the banks within the district be insufficient to provide the amount of capital required, the deficit may be made up by public subscription. However, no individual, copartnership, or corporation is permitted to own more than $25,000 worth of stock in any federal reserve bank. Should the total subscriptions by banks and public be insufficient, the deficit may be made up out of money in the United States Treasury. When the proper amount of capital stock has been subscribed to, an organization certificate is filed with the Comptroller of the Currency, and thereupon the federal reserve bank becomes a body corporate and may commence business.

The business of each federal reserve bank is conducted by a board of directors consisting of nine members and holding office for three years. The members are divided into three classes, A, B, and C. Class A consists of three members chosen by the stockholding banks. Class B consists of three members elected by the stockholding banks from among persons actively engaged in their district in commerce, agriculture, or some other industrial pursuit. Class C consists of three members appointed by the Federal Reserve Board. One of these members of Class C is designated by the Federal Reserve Board as chairman of the board of directors and as Federal Reserve Agent. As federal reserve agent he must make regular reports to the Federal Reserve Board, and act as its official representative. No senator or representative in Congress can be an officer or a director of a federal reserve bank. No director of Class B can be an officer, director, or employee of any bank, and no director of Class C can be an officer, director, employee, or stockholder of any bank.

Each federal reserve bank may establish branch banks within

its district. A majority of the branch bank's directors are appointed by the bank, the others by the Federal Reserve Board.

The earnings of the federal reserve banks are apportioned as follows: The stockholders are entitled to an annual cumulative dividend of 6 per cent on the paid-in capital stock. The remainder of the earnings must be paid to the United States as a franchise tax. One half of this remainder, however, is paid into a surplus fund until it amounts to 40 per cent of the paid-in capital stock of the federal reserve bank.

Federal reserve banks, including the capital stock and surplus therein, and the income derived therefrom, are exempt from all taxes except taxes upon real estate.

The Federal Reserve Board consists of seven members; the Secretary of the Treasury and the Comptroller of the Currency are members *ex-officio*, and five members are appointed by the President of the United States, by and with the advice and consent of the Senate. Not more than one of these appointees of the President can be selected from any one federal reserve district. At least two of them must be persons experienced in banking or finance. One of them is designated by the President as governor and one as vice-governor of the Federal Reserve Board. No member of the Federal Reserve Board may be an officer or director of any bank, banking institution, trust company, or federal reserve bank, or hold stock in any bank, banking institution, or trust company. No senator or representative in Congress can be a member of the Federal Reserve Board. The expenses and salaries of the Federal Reserve Board are paid through assessments levied upon the federal reserve banks throughout the country.

The Federal Reserve Board is authorized and empowered: (1) To examine at discretion the affairs of each federal reserve bank and of each member bank, and to issue a weekly statement showing the condition of each federal reserve bank; (2) To permit and in time of need to require federal reserve banks to rediscount the discounted paper of other federal reserve banks; (3) To suspend for not exceeding thirty days (and renew such

suspension for periods not exceeding fifteen days) any reserve requirement specified in the act; (4) To supervise and regulate the issue and retirement of federal reserve notes; (5) To add to the number of cities classified as reserve and central reserve cities under existing law, to reclassify them or to terminate their designation as such; (6) To suspend or remove any officer or director of any federal reserve bank; (7) To require the writing off of doubtful or worthless assets upon the books and balance sheets of federal reserve banks; (8) To suspend, for the violation of any of the provisions of the act, the operations of any federal reserve bank, and, if advisable, to liquidate or reorganize such bank; (9) To require bonds of federal reserve agents, and to make regulations for the safeguarding of all collateral, bonds, federal reserve notes, money, or property of any kind deposited in the hands of such agents; (10) To exercise general supervision over the federal reserve banks.

The Federal Reserve Board must annually make a full report of its operations to the Speaker of the House of Representatives, who must cause the same to be printed for the information of Congress.

All moneys held in the general fund of the United States Treasury, except the fund provided for the redemption of circulating notes, may be deposited in the federal reserve banks, and the banks may act as fiscal agents of the United States. All government revenues may be deposited in the federal reserve banks, and disbursements may be made by checks drawn against such deposits. Interest is paid the government upon all government deposits.

The Federal Reserve Board has power to issue to federal reserve banks circulating currency called federal reserve notes, which are obligations of the United States, and receivable by all federal reserve banks and member banks, and for all taxes, customs, and other public dues. They are redeemable in gold at the United States Treasury, or in gold or lawful money at any federal reserve bank. A federal reserve bank obtains such circulating notes through its federal reserve agent upon deposit

of gold and gold certificates or of collateral equal to the amount of notes required. The collateral consists of notes and bills accepted for rediscount. The notes are of the denominations $5, $10, $20, $50, $100, $500, $1000, $5000, $10,000.

Federal reserve notes are marked by a special number and letter indicating the bank through which they were issued. Notes issued through one federal reserve bank, when received by another federal reserve bank, must be promptly returned, for credit or redemption, to the federal reserve bank through which they were originally issued. No federal reserve bank can pay out notes issued through another bank under a penalty of a 10 per cent tax upon the face value of the notes paid out. Federal reserve notes redeemed at the Treasury of the United States must be paid out of the redemption fund maintained by each federal reserve bank with the Treasurer of the United States, and must be returned to the federal reserve bank through which the notes were issued. A federal reserve bank may retire its circulating notes at any time by depositing through its federal reserve agent gold or lawful money of the United States with the United States Treasurer. The notes issued through any bank are a first and paramount lien on all the assets of such bank.

Each federal reserve bank must maintain reserves in gold or lawful money of not less than 35 per cent against its deposits, and reserves in gold of not less than 40 per cent, normally, against its federal reserve notes in actual circulation. A part of this 40 per cent (not less than 5 per cent of the value of the notes) must be deposited with the Treasurer of the United States. By permission of the Federal Reserve Board, however, a federal reserve bank may let its gold reserve against its notes fall below 40 per cent, but it must pay a tax on the amount of the deficiency.

A Federal Advisory Council helps the Federal Reserve Board in an advisory capacity in the general affairs of the reserve banking system. The council consists of one member from each federal reserve district, and meets at Washington, D.C., at least four times each year.

(2) *National Banks.* — The national banks have not ceased to

exist under the new banking law. They have, however, become absorbed in the federal reserve system. They were allowed sixty days after the passage of the Federal Reserve Act in which to signify their intention of becoming member banks of the federal reserve system, and one year within which they should become actual members by subscribing to the stock of the federal reserve bank of their district. Under the terms of the act of 1913, those national banks which did not enter the new system within the time limit were forced to surrender their charters and to liquidate or become state or private banks. Nearly all the national banks of the country have signified their intention of becoming members of the federal reserve system.

It will be necessary to study the original nature and organization of the national banks, as well as their present status, in order to appreciate the changes made by the new law.

The method of organization and other details concerning national banks are laid down in the National Bank Act of 1863, and in the amendments to that act made in subsequent years.

A bureau of the Treasury Department was created, the chief of which is the Comptroller of the Currency, who executes all the laws passed by Congress affecting the national bank notes, and makes an annual report to Congress on the condition of all national banks. Under the Federal Reserve Act of 1913, the Comptroller of the Currency also is charged with the issue and regulation, under the general supervision of the Federal Reserve Board, of all federal reserve notes.

At least five stockholders join to form a national bank. They make application to the Comptroller of the Currency, stating the standing of each and showing some prominent person's voucher for their character. "Articles of Association" are made out, as prescribed by law, stating the title, location, number of directors, time of meeting for election, amount of capital stock, etc. There must be at least five directors, each a citizen of the United States, and each an owner of at least ten shares (or five shares, if the capital does not exceed $25,000). Three fourths of the board must have resided a year in the state, and three

fourths of the board must continue to reside as directors. Every $100 share gives a vote.

A " Certificate of Association " is made out. It contains among other things the names and residences of all the subscribing shareholders.

The amount of capital must be as follows: —

$ 25,000 or more for a place having	3,000 inhabitants or less;
50,000 or more for a place having	6,000 inhabitants or less;
100,000 or more for a place having	50,000 inhabitants or less;
200,000 or more for a place having over	50,000 inhabitants.

One half of the capital must be paid up in cash at the time of organization, the rest in installments of 10 per cent a month.

An oath is taken by the directors to " diligently and honestly administer the affairs " of the bank. A president and a cashier are elected, together with the other officers as they may be needed.

Up to 1913, the bank had to invest in United States government bonds one quarter of its capital, if the capital was $150,000 or less, and $50,000 at least, if the capital was greater. (Act July 12, 1882.) At first, circulating notes could be taken out by the bank to the amount of 90 per cent of its bonds, but this amount was changed by the act of March 14, 1900, to equal the par value of the bonds. As explained later, the national bank notes are now in process of being retired. National banks are no longer required to invest in bonds.

A reserve amounting to 5 per cent of the circulation must be kept for the redemption of the notes in circulation. Should the bank desire to withdraw its circulation, it must make a deposit of lawful money with the United States Treasury to redeem the notes. Under the old law, however, not more than the sum of $9,000,000 of notes could be withdrawn from circulation by national banks in one month. (See law of May 30, 1908.) While the notes are in circulation, the bank pays to the United States Treasury a yearly tax of one half of 1 per cent on notes secured by 2 per cent bonds, and 1 per cent on notes secured by bonds paying a higher rate of interest. All state banks are

charged a 10 per cent tax on their notes, a tax which is practically prohibitive.

When the stockholders have paid in the amount per share of their holdings, each one receives a " Certificate of Stock," and these certificates are recorded in one of the books of the bank and are transferable only on the books of the bank. Thus the stockholders of the bank and the number of shares each one holds can be known at all times.

Officers are chosen and by-laws are made in accordance with the banking laws of the country.

The law requires that one tenth of the net earnings be put aside annually to form a fund in reserve. This is known as the " Surplus and Undivided Profits Fund," and it must reach at least 20 per cent of the capital stock. The " Surplus " sometimes is far in excess of the capital. When the surplus is secured, dividends may be paid to the stockholders. These dividends are the earnings of the banking business.

Should the bank meet reverses, the stockholders may be called upon to supply the funds needed to carry on business. In this case, an assessment is levied on each stockholder, proportionate to the number of shares held by him.

Reserves in lawful money must be kept with the Federal Reserve Bank to meet the deposits.

Under the old law, up to 1913, this reserve had to be, for ordinary banks, 15 per cent of their outstanding notes and deposits. Three fifths of this amount might be redeposited with other national banks in 46 (formerly 17) specified large cities, known as Reserve cities. For reserve city banks, the reserve had to be 25 per cent of their deposits and outstanding notes. One half of this amount might be redeposited in national banks in New York City, Chicago, and St. Louis, which are known as Central Reserve cities.

Under the Federal Reserve Act of 1913, as amended June 21, 1917, country national banks, which have become member banks of the Federal Reserve system, must maintain with the Federal Reserve banks of their respective districts reserves equal to not

less than seven per cent of their demand deposits and three per cent of their time deposits. Reserve city national banks must maintain reserves equal to not less than ten per cent of their demand deposits and three per cent of their time deposits. Central reserve city national banks must maintain reserves equal to not less than thirteen per cent of their demand deposits and three per cent of their time deposits. (See, however, amendment to Federal Reserve Act passed Sept. 26, 1918.)

A national bank may, under the regulations and subject to such penalties as may be prescribed by the Federal Reserve Board, allow its balance to fall below the required amount, but such bank can make no further loans and can pay no dividends until the total balance required by law is fully restored. (*Ib.*)

When all the formalities required in the organization of a national bank are complied with, the Comptroller issues a certificate authorizing the corporation to begin business. Charters, which may be extended, are given for twenty years.

Certain restrictions are imposed on national banks to make the banking business safer. Thus,

No real estate may be held for longer than five years.

Only legal interest may be charged by the bank on its loans. The legal interest is the interest allowed by law in the state.

Not more than one tenth of the capital may be loaned to one individual or one corporation.

A bank may not loan on its own shares, nor may it incur indebtedness in a sum exceeding the paid-in capital.

The bank must make five sworn reports yearly to the Comptroller, and special reports when demanded. Bank examiners may examine the affairs of the bank at any time.

If the bank goes into liquidation, voluntary or forced, the Comptroller appoints a receiver. The circulating notes of the bank have a prior lien on the assets. The depositors and other creditors are then paid, and last of all the stockholders.

As already noted, some of the foregoing provisions affecting the organization of national banks were changed by the Federal Reserve Act. Thus, national banks are no longer obliged to invest

any portion of their capital in United States government bonds. When the national bank notes shall have been replaced by federal reserve notes, the provisions affecting the national bank notes will no longer be operative.

The manner of replacing the national bank notes is as follows: After Dec. 23, 1915, the national banks may make application to the Treasurer of the United States to sell the 2 per cent United States bonds in their possession and now forming the basis of note circulation. The Federal Reserve Board may oblige the federal reserve banks to buy the bonds offered by the national banks. Not more than $25,000,000 of such bonds can be purchased by the federal reserve banks in one year. The federal reserve banks must deposit lawful money with the United States Treasurer for the purchase price of such bonds. This money must be used by the United States Treasurer to cancel and permanently retire the national bank notes. The federal reserve banks purchasing the bonds may take out circulating notes equal to the par value of the bonds. The 2 per cent United States bonds now securing the circulating notes will gradually come into the possession of the federal reserve banks, but these bonds which now bear the circulation privilege will gradually be exchanged for 30-year 3 per cent gold bonds without the circulation privilege, and thus United States bonds will ultimately cease to be the basis of note circulation.

Under the new law, the stockholders of every national bank are held individually responsible for all contracts, debts, and engagements of the bank, each to the amount of his stock therein, at the par value thereof, in addition to the amount invested in such stock. The amount of reserves and the manner of keeping such reserves are modified as seen on a preceding page (see page 179). National banks together with all member banks must be examined at least twice each year, and oftener if considered necessary, by examiners appointed by the Comptroller of the Currency. When a national bank or any member bank goes into liquidation, voluntary or forced, and a receiver is appointed by the Comptroller, such member bank must surrender all

of its holdings of the capital stock of the federal reserve bank of which it is a member, and receive payment therefor less any liability it may have with the federal reserve bank.

(3) *State Banks.* — State banks are organized according to the laws of the state in which they are situated. These laws differ in the different states.

State banks do not issue circulating notes. They could do so before 1865, but in that year a law was passed imposing a yearly tax of 10 per cent on the circulation of state banks, with the result that all such notes were withdrawn.

(4) *Private Banks.* — Private banks are organized by private men of means or private corporations. They are restricted by no special laws of state or nation, and carry on their business like any other business. Their personal credit must secure the confidence of the people. If banks organize under state or national laws, they are obliged to submit their undertakings to these laws, but, because the state or nation stands sponsor for them, they gain more extensive patronage.

(5) *Loan and Trust Companies.* — Loan and trust companies are organized under the laws of the several states. They may be termed American institutions, dating from 1812. They are stock companies, the shares being held by stockholders who receive a profit in the shape of dividends, and are liable for losses proportionate to the holdings of each. The company is managed by a board of directors or trustees elected by the shareholders.

Reports are made twice a year to the State Banking Department. A receiver winds up the business in case of voluntary liquidation or failure.

Originally intended for the business of securing lives and granting annuities, the loan and trust companies later took up the business of holding trusts and procuring capital for various enterprises. These latter forms of business finally became the specialty of the loan and trust companies, life insurance and the granting of annuities becoming the special business of life insurance companies.

State banks, private banks, and loan and trust companies

may become member banks of the federal reserve bank of the district in which such banks are located. To become a member bank, a bank must subscribe to the capital stock of the federal reserve bank in its reserve district in a sum equal to 6 per cent of its paid-up capital stock and surplus. The bank must possess a paid-up unimpaired capital sufficient to entitle it to become a national bank in the place where it is situated, and be subject to all the provisions and regulations of the national bank law which have not been repealed by the Federal Reserve Act.

(6) *Savings Banks.* — A savings bank takes deposits not for its own use but for safekeeping. "The prime consideration is safety, not profit or income." (Fiske, *The Modern Bank*, p. 244.)

The savings bank is in the charge of trustees, who serve gratuitously, and should have no personal interest in the use of the funds. The officers are chosen by the trustees and are paid salaries.

The trustees decide on all investments, and they declare the interest to be paid on deposits. They hold frequent meetings to receive reports from the officers, and direct all business. The trustees are the directors of the bank, and in them all final responsibility rests.

The funds belong to the depositors, and the revenue goes to the depositors. There may be a surplus fund, but there are no "Undivided Profits." The surplus is a safeguard against losses and emergencies.

"Savings banks are organized either as corporations or as mutual societies managed by a board of trustees acting for the depositors. The latter type is especially common in the Eastern states." (Ely, *Outlines of Economics*, p. 264.)

Sometimes savings banks are organized with capital stock. Such are the "Stock Savings Banks." When there are profits over and above the interest due the depositors, these profits are paid in dividends to the stockholders.

A vote of two thirds of the shares or two thirds of the trustees can discontinue the bank. A receiver is then appointed to liquidate the assets and pay off the depositors and stockholders.

In many states supervision and regulation of savings banks is carried on by state officials. In New York, no savings bank can be organized without the consent of the Superintendent of the Banking Department. Semiannual reports must be given to the Superintendent, and an examination of the affairs of the bank is made every two years. Special reports may be required and special examinations held at any time. The Superintendent has no immediate power over the officers of the bank, but he may report any defect to the Legislature and may apply to the courts for a remedy.

Postal Savings banks, a special kind of savings banks maintained by the government, are described in Chapter XII.

Functions of Federal Reserve Banks. — The functions of a federal reserve bank are: (1) To receive deposits from its member banks, and from the United States; (2) To discount notes, drafts, bills of exchange, acceptances arising out of actual commercial transactions (NOTE. — A federal reserve bank may not discount notes, drafts, or bills of exchange issued or drawn for the purpose of carrying or trading in stocks, bonds, or other investment securities, except bonds and notes of the government of the United States); (3) To make advances to its member banks on their promissory notes; (4) To purchase and sell in the open market, at home or abroad, cable transfers and bankers' acceptances and bills of exchange; (5) To deal in gold coin and bullion at home and abroad, to make loans thereon, and to contract for loans of gold coin or bullion; (6) To invest in United States bonds and bonds issued by any state, county, district, or municipality; (7) To purchase from member banks and sell bills of exchange arising out of commercial transactions; (8) To establish from time to time, subject to revision of the Federal Reserve Board, rates of discount to be charged by the federal reserve bank for each class of paper; (9) To establish accounts with other federal reserve banks for exchange purposes, to open and maintain banking accounts in foreign countries, to establish agencies in such countries for purchasing, selling, and collecting, and to buy and sell through correspondents and

agencies, prime foreign bills of exchange; (10) To be the medium through which federal reserve notes shall be issued.

Functions of Other Commercial Banks. — The banks here included are member banks of any federal reserve bank, state banks, and private banks. The functions of these banks include the following items: discounting negotiable paper; receiving deposits; buying and selling exchange, coin, and bullion; making loans; giving bank credit to merchants; loaning money on farm lands and other real estate; establishing branch banks in foreign countries; acting as agents for insurance companies and in real estate deals, and in a fiduciary capacity for other persons.

(1) *Discounting Negotiable Paper.* — When a bank cashes any form of paper, it charges a certain rate of discount for that accommodation. A merchant, for example, may have promissory notes of his debtors. These he may indorse and have cashed at once by the bank. His debtors are now the debtors of the bank, but he is responsible if those debtors fail to pay the bank when the notes mature. The bank attends to the collection of these notes.

The rate of discount depends on various factors, which may be summed up as follows: —

1. The amount of money available in the hands of bankers for the discount business. This will depend on two things, — the volume of standard money in general circulation in the country, and the state of trade in the country or in the locality where the discount is asked. When business is brisk, there is great demand made by merchants to have their bills receivable discounted, and the demand for money will cause the rate to rise, while in times of dull trade, when the bills of the merchants are few and the demand for money slight, the rate will be low.

2. The general rate of profit that may be obtained for the use of capital in business. When this rate of profit is high, the rate of discount will be relatively high; when the profit rate is low, the discount rate will be relatively low.

3. The credit of the merchant whose bills are discounted.

4. The credit of the indorser in " double-name " paper. In

these two items, 3 and 4, the poorer the credit, the higher the rate.

5. The time of the negotiable paper. Time enters here as an element of risk. The longer the time the banker has to wait for the maturity of the bill, the greater the risk which he runs, and hence a higher rate of discount is charged for a long-time bill.

(2) *Receiving Deposits.* — In some cases banks do not pay interest on deposits, but often competition among banking institutions leads them to offer a low rate of interest.

Up to the establishment of the federal reserve system, the national banks were frequently made depositaries of public moneys of the United States. Government deposits in such banks were, until 1907, " limited to the current internal revenue receipts." (Hepburn, *Contest for Sound Money*, p. 423.) A law enacted in 1907 allowed customs receipts to be deposited in the banks. By the Federal Reserve Act of 1913, it is prescribed that all government moneys, except the fund kept for the redemption of circulating notes, shall be deposited in federal reserve banks. The Secretary of the Treasury, however, has the right to use member banks as depositaries (Sec. 15).

(3) *Buying and Selling Exchange, Coin, and Bullion.* — The buying and selling of exchange has been explained in treating of bills of exchange.

Whenever large amounts of specie or bullion are required for shipment to any point, usually the banks carry out the transaction, charging certain prescribed rates for the labor.

(4) *Making Loans.* — Loans may be made in various ways. A merchant may, for example, need money to carry on a pressing business transaction. He makes out his personal note promising to pay a certain sum to the bank at a future day, and gives it to the bank. The credit of the merchant may be such that the bank may advance the money, deducting the discount. The merchant's note is single-name paper. If the note is indorsed by some one else, it is called double-name paper or indorsed paper.

Or, again, the merchant may borrow money from the bank by giving his personal note and depositing some kind of "collateral." The collateral which is offered for loans may be of great variety. Whether or not the collateral shall be accepted depends in great measure on the experience and prudence of the banker.

"Different communities have to deal with different securities. In Kansas the usual kinds are land, city lots, and occasionally the appurtenances to real estate, apart from the real estate; growing crops, rough feed, grain, elevator and warehouse receipts, bills of lading, live stock, poultry, produce, stocks, bonds, notes, contracts, leases, orders, warrants, certificates of deposit, insurance, products of mines, implements, machinery, furniture, merchandise, libraries, jewelry, personal service, rents, and perhaps others. Much of the property named is unfit for security, but all of it has been accepted." (J. T. Bradley, in *Practical Problems in Banking and Currency*.)

Much care is expended by banks in obtaining accurate knowledge of the credit of the borrowers, who as a rule are the regular customers of the bank, and of the value of the security offered by them. Since 1895, many banks have established a credit department under the management of a credit clerk. The duty of this department is to investigate "the personal character and habits, and the reputation for business ability and rectitude, . . . the business methods and practices" of those who apply for loans. Blank forms are used on which the borrower must state his business and resources, capital, investments, property, business profits, and, in fact, everything that will give assurance of his ability to meet his obligations. Moreover, the credit department consults commercial agencies, makes inquiries in person and by correspondence, and uses all available sources of information to gain exact knowledge of the standing of the applicant. All the information gained is kept on record in the bank to be used in case of future loans.

If the loan is to be paid after some time, — thirty, sixty, ninety days, — it is a time loan.

If the bank in loaning its money makes the condition that it may call in the loan at any time, the loan is a demand loan or a call loan.

The loans made by commercial banks are generally made on collateral that can be quickly liquidated in case of need. Loans are seldom made on real estate mortgages or other security on which it would be difficult to realize in case of sudden demand. Call loans, or loans for a short period of time, are those mostly dealt in.

The extent to which the business of loans is carried on by the commercial banks is enormous. On June 30, 1920, the loans of national banks amounted to over thirteen billions of dollars, distributed as follows: —

Loans on Demand, secured	$1,654,984,000
Loans on Demand, unsecured	707,229,000
Loans on Time, secured	3,246,028,000
Loans on Time, unsecured	7,604,971,000
	$13,213,212,000

(Annual Report Compt. Cur., 1920, p. 121.)

On the same date, the loans of all United States banks amounted to over thirty-one billions of dollars, as follows: —

Loans secured by real estate and collateral	$11,076,119,000
All other loans	20,180,028,000
	$31,256,147,000

(*Ib.*, p. 253.)

(5) *Giving Bank Credit to Merchants.* — An immense amount of business is done through credit. But it is found better by business men to transform their personal credit into what is called bank credit. A merchant's own personal note would pass as a medium of exchange, if at all, only among a very limited number of persons, whereas, if he secures the credit of a bank, he will have a medium of exchange in the form of checks on the bank which will be accepted practically everywhere. This selling of bank credit is one of the means whereby banks give immense aid to commercial life.

The merchant may have his " bills receivable " discounted, or may give his notes and collateral, and may get credit for the amounts of the bills and notes. He need not have them cashed at once, but may leave the amounts to his credit in the bank to be drawn on later when needed. The bank in this case makes him a depositor for these sums, and the credit of the bank becomes the credit of the merchant.

The modern commercial bank is a coworker with the merchants. The merchants by their sales produce the credits. These the bankers accept and change into bank credits, which furnish the great mass of the medium of exchange used in commerce.

The bank is well called a credit institution rather than a money institution. " It deals in credits. The bulk of its assets consists of evidences of indebtedness, and the bank is itself the largest debtor relative to its capital, in the business world. In short, everybody owes the bank and the bank owes everybody, and there is little about the bank or its function which does not smack of indebtedness." (A. B. Stickney, in *Practical Problems in Banking and Currency*, p. 207.)

All the credits of merchants which are received by the banks and transformed by them into bank credits are put down as deposits. Hence an increase of deposits does not mean an increase of money, but it means an increase of indebtedness on the part of the merchants, which indebtedness has been transformed into bank credits. " During the period in which the so-called deposits of the national banks have increased $1,500,000,000, the money in the banks has increased only $207,000,000." (*Ib.*)

In the panic of 1893, the deposits decreased $314,000,000, which means that the merchants did not buy bank credits, or that the banks would not exchange credits with the merchants. The decrease of deposits in that year was due to the action of the banks in contracting their so-called loans. It may not have been the fault of the banks. " That the American bank, as at present organized," says a writer of that period, " should

falter at every minor commercial crisis, and stop, as far as possible, the swapping of credits in a major panic, seems inevitable. The necessity is due to the lack of a banking system." (*Ib.*, p. 211.)

Bank credits furnish an unlimited medium of exchange. When bank credits are stopped, there is a shortage of the medium of exchange, of money, and thereupon a panic.

(6) *Loaning Money on Farm Land and Other Real Estate.* — National banks not situated in a central reserve city may make loans secured by improved and unencumbered farm land and other real estate located within one hundred miles of the place in which the bank is located. Loans on farm land cannot be made for a longer period than five years, and loans on other real estate cannot be made for a longer period than one year, and neither kind of loan can be made for an amount exceeding 50% of the actual value of the property.

(7) *Establishing Branch Banks in Foreign Countries.* — National banks possessing a capital and surplus of $1,000,000 or more may establish branch banks in foreign countries for the furtherance of the commerce of the United States, and to act, if required, as fiscal agents of the United States.

(8) *Acting as Agent for Fire, Life, and Other Insurance Companies.* — National banks located in places where the population does not exceed 5000 inhabitants may act as the agent for any fire, life, or other insurance company by soliciting and selling insurance and collecting premiums on policies issued by such company. (Amend. Sept. 7, 1916.)

(9) *Acting as Agent in Real Estate Deals.* — National banks may act as the brokers or agents for others in making or procuring loans on real estate located within one hundred miles of the place in which said bank is located. (*Ib.*)

(10) *Acting in a Fiduciary Capacity for Other Persons.* — A national bank may act as trustee, executor, administrator, or registrar of stocks and bonds, guardian of estates, assignee, receiver, committee of estates of lunatics, or in any other fiduciary capacity the exercise of which is permitted to state banks, trust

companies, or other corporations in any state. (Amend. Sept. 26, 1918.)

Functions of Loan and Trust Companies. — The functions of loan and trust companies are the following: —

1. They receive deposits. Until recently they were not required to keep any stated percentage of their deposits on hand as a cash reserve. They usually deposit their funds on demand in commercial banks. Since Feb. 1, 1909, loan and trust companies doing business in New York state must keep reserves in the sum of 15 per cent or 10 per cent of their deposits, dependent on the amount of population of the place in which business is transacted. Where the population of the place is less than 1,800,000, part of the reserves may be deposited on call in other banks or trust companies.

2. They invest their funds — capital and deposits — in bonds and mortgages secured by real estate; in United States bonds and stocks; in bonds of the counties, cities, and towns of the state in which they are situated; in bonds of the state; in bonds secured by personal property. (Deposits are invested in this last item.)

3. They make loans on real estate or personal property; on collateral security of stocks and bonds; on other security.

4. They may be appointed to act as trustee under any mortgage or bond issued by any municipality, body politic, or corporation, or to execute any other municipal or corporate trust; to act under appointment of any court, as guardian, receiver, or trustee of any minor, or as trustee or executor for the estates of deceased persons or of lunatics, idiots, or habitual drunkards; to act as fiscal or transfer agents for any state, municipality, body politic, or corporation.

5. They purchase, invest in, and sell stocks, bills of exchange, bonds and mortgages, and other securities.

6. They borrow money.

7. They receive upon deposit for safekeeping bonds, mortgages, jewelry, plate, stocks, and valuable property of any kind.

8. They guarantee or insure persons holding titles to real estate against loss.

Functions of Savings Banks. — (1) *Deposits.* — Savings banks receive deposits. A depositor upon making a deposit receives a pass book in which the deposit is entered. This serves as a receipt book, indicating the indebtedness of the bank to him.

The money deposited will draw interest, which is computed semiannually or quarterly.

Money deposited may be withdrawn, but the bank may insist on demanding thirty or sixty days' notice whenever large sums are to be withdrawn, or when there is danger of a run on the bank. This agreement is usually entered into at the time of deposit. Interest on the money withdrawn is lost for the quarter or the half year, if taken out before the expiration of that period.

Usually deposits are limited to a certain amount from each person. This is due to the principle that savings banks were instituted for the benefit of the poorer classes, to enable persons of small means to participate in the benefits to be derived from the investment of their combined deposits. Hence limitations are fixed with a view to excluding the wealthier class.

(2) *Investments.* — The deposits may be invested in first mortgages on real estate to the amount of 60 per cent of the market value of the property. In this respect savings banks differ from commercial banks. Deposits in savings banks are supposed to be more or less permanent, and hence they can be invested in securities that are but slowly liquidated. Such are mortgages on real estate. Banks that may require money on short notice cannot allow their securities to be tied up in the form of real estate mortgages.

Savings banks may invest in United States bonds, state bonds, bonds of counties, cities, towns, certain railroad bonds, when the railroads have been paying dividends for a certain number of years past, and in bank stocks.

The savings banks may own real estate of two kinds: (1) They may own the buildings they use; they may rent out what portions of the buildings they do not need for bank use. (2) When mortgages are foreclosed, they may hold the property and collect rents for it.

QUESTIONS

1. What is banking? What is a bank?
2. Name the different kinds of banks. Why are certain banks called commercial banks?
3. When were federal reserve banks created? How much capital must a federal reserve bank have?
4. What are member banks? How much of their capital and surplus must member banks invest in the stock of a federal reserve bank?
5. Explain the constitution of the board of directors of a federal reserve bank. How are the earnings of a federal reserve bank apportioned?
6. Describe the constitution and the powers of the Federal Reserve Board. Where does the power of issuing circulating notes reside?
7. Explain the method of redemption of circulating notes. How much reserve must a federal reserve bank maintain?
8. What reserves must be maintained by member banks?
9. Describe briefly the organization of a national bank. Mention the principal changes that have been made in the status of national banks by the federal reserve system.
10. Explain the method by which the national bank notes now in circulation are to be retired.
11. How are state banks organized?
12. How are private banks organized?
13. How are loan and trust companies organized?
14. What is the prime object of a savings bank? Who are the managers of a savings bank?
15. What are the functions of a federal reserve bank?
16. What are the functions of other commercial banks?
17. What is discount? What factors determine the rate of discount?
18. How are bank loans made? What may be the nature of the security offered for loans?
19. How do merchants secure bank credits? What is the advantage of bank credits?
20. Describe the functions of loan and trust companies.
21. Describe the functions of savings banks.

CHAPTER XI

HISTORY OF BANKING

I. History of Banking in General

History of Banking in General. — Banking originated in Italy in the twelfth century. The first banks were established in Venice, 1164–1178; Genoa, 1300; Florence, 1345. (P. H. Holzapfel, O. F. M., *Die Anfänge der Montes Pietatis*, pp. 17, 18.) The functions of these were very limited as compared with the functions of banks of the present day.

Then came the Bank of Amsterdam in Holland in the seventeenth century (1609). This was the more evident precursor of the present form of banking. It lasted for two hundred years.

The banks of Antwerp and Hamburg were founded on the principle of the Amsterdam Bank. The Bank of Hamburg, which began in 1619, was merged in 1875 in the Reichsbank (Imperial Bank) of Germany.

Banks were gradually established in different countries — England, Scotland, Ireland, France, Germany, Russia — and out of very crude and imperfect beginnings developed into the great systems of to-day.

The following countries have a government or national bank, which is the depositary of the government funds, is supported wholly or in part by the government, and has exclusive right to issue notes: —

England	Bank of England, 1694.
France	Bank of France, 1800.
Germany	Reichsbank, 1875.
Russia	Imperial Bank of Russia, about 1856.
Holland	Bank of Netherlands, 1814.
Belgium	National Bank of Belgium, 1850.
Norway	Bank of Norway. 1814.

Denmark	National Danish Bank, 1818.
Spain	Bank of Spain, 1856.
Austria-Hungary	Austro-Hungarian Bank (1816), 1877.

II. History of Banking in the United States

In the United States, during the colonial times, the first attempt at the establishment of a bank was made in Massachusetts in 1714. The bank lasted but a short time. After the adoption of the Constitution, banks were organized in many of the states.

1. **Bank of the United States.** — Alexander Hamilton, the first Secretary of the Treasury, drew up a plan for the establishment of a United States Bank, " to be a regulator of the currency, a depositary for public money, and a fiscal agent for the government." A charter was granted the bank, to run for twenty years. The bank lasted from 1791 to 1811.

The first United States Bank had a capital of $10,000,000 divided into 25,000 shares. The government held one fifth of the shares. The others were subscribed for by private individuals and were paid for, one fourth in coin and three fourths in government bonds.

The management of the bank was placed in the hands of the shareholders resident in the United States. It was supervised by the Secretary of the Treasury. It established branches in nearly all the leading cities. Its circulating notes reached the value of about one half of the capital.

The bank was a success, and when it went into liquidation, the shareholders received $434 for each $400 share. At the expiration of the twenty years, the charter was not renewed.

In 1816 the second United States Bank was established, the charter again to run for twenty years. The capital was fixed at $35,000,000, one fifth to be subscribed by the government. Five of the twenty-five directors were to be appointed by the government. Public moneys were to be deposited in the bank, although the Secretary of the Treasury had the power to deposit in other banks. Branches were to be established everywhere. " The bank acted as agent of the Treasury, taking charge of

all loan negotiations and performing various duties free of charge." (Handy, *Banking Systems of the World.*)

The second United States Bank came under the influence of politics, and its management was dishonest and disorderly. In spite of this, it had a beneficial effect on banking methods, and restored the credit of the nation, which had been jeopardized by the irresponsible practices of the state banks. The bank was violently opposed by the state banks, which resented its efforts to curb their speculative mania. By the order of President Jackson (1833), the government deposits were withdrawn from the bank to be deposited in favorite state banks. When the time came to renew the charter, a renewal was voted by Congress but vetoed by the President. (Cf. E. B. Andrews, *History of the United States*, vol. I, pp. 328, 357.)

The first and second United States Banks served as the fiscal agents of the government, furnished an adequate currency, regulated the note issue of other banks, and equalized the rate of money over the country.

A deep-seated prejudice existed, however, against a central government bank such as was the United States Bank. As representing a principle, it was held to be opposed to the principle of states' rights, to be a concentration of unlimited power in the hands of a few, to be the most perfect and most powerful trust that could be invented for the favoring of its own creatures and the destruction of its opponents, to be the contrivance of a party that sought a federation and a centralization of power, to be a measure opposed to the Constitution of the United States.

In the popular opinion, " the bank stood for the aristocracy, for distinction of classes, for the creditor as against the debtor, for the bondholders and the people of leisure." (R. T. Stevenson, *The History of North America,* vol. XII, p. 261.)

The hostile attitude of the people was manifested most emphatically against the second United States Bank. " From the day its doors were opened for business, the bank had been the object of bitter hatred by a large part of the people. Polit-

ical leaders had denounced its charter as unconstitutional. The press had described it as a hydra-headed monster, as a grinding monopoly which oppressed the state banks, robbed the people, made money dear, drew specie from the West, and caused the hard times of 1819." (McMaster, *History of the People of the United States*, vol. VI, p. 1.)

The Bank had twenty-five branches throughout the states, but several states strove to drive the branches outside of their confines.

The rechartering of the Bank became a national political question in 1832, and Jackson, who opposed the charter, received the popular vote 687,502 against Clay's 530,189. The electoral vote stood 219 to 49.

The Supreme Court had pronounced the Bank charter constitutional in 1819, but Jackson declared that " the opinion of the judges has no more authority over Congress than the opinion of Congress has over the judges; and on that point the President is independent of both," — an assertion fraught with the gravest danger to the principle of American government. In his veto of the bill rechartering the Bank, he declared that some of the powers of the Bank " were unauthorized by the constitution, subversive of the rights of the states, and dangerous to the liberties of the people," denounced it as a monopoly under the control of capitalists, many of whom were foreigners, a colossal money power which, with its enormous political influence, " might make us tremble for the purity of our elections in peace, and for the independence of our country in war." (D. H. Montgomery, *The Student's American History*, p. 321.) " The [veto] message was a compound of virile argument, bungling economics, and dexterous appeals to the masses. In it the President put Americans against foreigners; the poor against the rich; the West against the East; and the people against privilege. In the main he drove straight to the center of popular prejudice, and won." (R. T. Stevenson, *History of North America*, vol. XII, p. 292.)

2. **Independent Treasury System.** — In 1837 the system

known as the " Independent Treasury System " was advocated, but was not finally adopted until 1846. The United States Treasury became the custodian of its own funds, and this system has prevailed down to our own time, although somewhat modified so as to allow the deposit of a certain part of the national moneys in specified national banks throughout the country.

3. **State Banks.** — The state banks had been established even before the establishment of the first United States Bank in 1791. In 1781, the first real bank was established in Philadelphia. The Bank of Massachusetts was established in Massachusetts in 1784. Other banks soon followed in that state, and in 1805 the first law to regulate banking was passed. Incited by the success that attended the United States Bank, state banks were started in nearly all the states.

During these early years, banking was in a deplorable condition. There was little or no restraint and little or no supervision. There existed a mania for issuing circulating notes, and the amount of issue was seldom restricted to any proportionate amount of money held by the banks. The country was flooded with bank notes, which owed their credit merely to the standing of the banks that issued them, and as the standing of many of the banks was very precarious, some having issued their notes without any capital at all and without any intention of redeeming them, the notes differed widely in value, and there was no security in monetary transactions. In 1811, there were $46,000,000 of bank notes in circulation. During the war with England (1812–1815) $110,000,000 of such notes were in use.

The second United States Bank was established by Congress in 1816 to remedy to some extent the evils then existing.

After the liquidation of the second United States Bank (1836), the state banks remained the only system of banking. In 1837 there was a suspension of specie which brought ruin to many banks. Banking continued in an unhealthy condition owing to the little restraint on the issue of bank notes and to the slight supervision of the state governments over the banks.

In several states efforts were made to remedy the evils of banking. In Massachusetts, the " Suffolk Bank System " was adopted. The name is derived from the fact that the Suffolk Bank led in the movement.

" The Suffolk Bank, with the coöperation of six other banks of Boston, organized a clearing house for notes of outside institutions, by establishing a redemption fund in the Suffolk Bank. The banks which entered the system would have their notes received at par in Boston, the financial center, and would be called upon for redemption only at specified periods by the Suffolk, which would receive in redemption, also at par, any notes of banks in good standing in lieu of specie." (A. B. Hepburn, *Contest for Sound Money*, p. 92.)

The effect of the system was to restrain circulating notes within reasonable limits. It served to lessen the disaster to New England banks in the panic of 1837.

New York also strove to provide a remedy against the general disorder of banking. In 1829, the " Safety Fund System " was adopted by statute. It required banks to contribute to a joint fund for the redemption of notes and payment of deposits of any of their number which should be overtaken by disaster. Each bank contributed annually a certain amount to the fund until the contribution amounted to 3 per cent of the total bank capital. The system, though good in itself, failed on account of defects in details and careless enforcement of its provisions.

In 1838, New York passed the " free banking " law. It provided " that anybody might form a bank and issue notes without receiving a charter from the legislature, as had been the custom in the past. But these notes must be based on United States bonds, or bonds of the various states (subsequently limited to New York bonds), or approved real estate mortgages, which securities were deposited with the state as security." (Handy, *Banking Systems of the World*, p. 16.)

Similar laws were passed in other states. The theory was good, but much depended on the enforcement of the laws, as well as upon the nature of the laws.

As a result of inadequate laws and the non-enforcement of laws, the business of banking remained in a very unsettled condition throughout the country, although here and there might be found cases of good and honest business management and sound banking laws. As a rule, however, there was instability in the currency, many failures of banks, and much loss and suffering among depositors.

A. B. Hepburn, in his *Contest for Sound Money*, thus gives a general review of "Banking conditions for the whole period of national existence prior to the Civil War: —

"1. First United States Bank (1791–1811) — Sound bank currency.

"2. Interval (1812–1816) — State bank currency inflation, suspension, disasters involving enormous losses.

"3. Second United States Bank (1817–1836) — At first unsettled conditions as to currency and business, then sound paper currency by reason of United States Bank enforcing redemption of state bank notes, and formulating a standard of credit to which the state banks in competition were obliged to conform; then during last years of its existence unsettled conditions owing to political power exerted to prevent renewal of bank's charter.

"4. 1837–1846 — Inordinate inflation, suspension and losses measured by the hundred millions, withdrawal of government funds from the banks, with the declared hope of preventing undue expansion of bank note issues by so doing.

"5. 1847–1860 — Banking becoming more conservative; deposits counting more and note issues less as a means of extending credit; note issues, however, unrestrained and entailing enormous losses upon the people; failure of subtreasury to restrain or control banking methods, but disastrously interfering with business by withdrawing from the channels of trade and locking up funds which should be current." (p. 169.)

4. **National Bank System.** — *Constitution and Growth.* — The national bank system was introduced by law of Congress, Feb. 25, 1863. It owed its origin to the Civil War. Its main object was to secure a market for United States bonds, so

that the government might get money to defray the heavy expenses of the war.

The organization of national banks has been described on a preceding page. As there mentioned, the banks were obliged to invest a certain proportion of their capital in United States bonds. They were allowed to issue bank notes up to 90 per cent of their bond investment. The limit of the whole issue of circulating notes was fixed by the laws of 1863 and 1864 at 300 millions of dollars. In 1870 the limit was raised to 354 millions, and in 1875 all limit was removed.

On March 3, 1865, a 10 per cent tax was imposed on the note issues of all banks not national banks, and this tax, by practically prohibiting the circulating notes of state banks, caused many of them to secure national bank charters.

By an Act of June 20, 1874, a national bank redemption bureau in the Treasury Department in Washington was authorized.

Other laws affecting the system were made, until the law of March 14, 1900, finally determined the status of national banks for the next thirteen years. By this act, the minimum capital in a place having 3000 or less inhabitants was fixed at $25,000; the amount of circulating notes that could be issued by any bank was fixed at the par value of the United States bonds held by the bank instead of 90 per cent of such bonds as before; the tax on circulating notes was reduced from one per cent per annum to one half of one per cent per annum on all bonds paying 2 per cent interest. The 2 per cent bonds were instituted in 1900 by consolidating the 3s of 1908–1918, the 4s of 1907, and the 5s of 1904 into what are called Consols of 1930.

The growth of national banks was at first slow, but after the passage of the law of March 3, 1865, imposing a tax of 10 per cent on the note issues of all other banks not national banks, and especially after the law of March 14, 1900, the activity and growth of national banks was remarkable. Shortly after the former act, over $400,000,000 worth of United States bonds were held by the national banks, and in a few years after the act of 1900, the number of national banks increased by 691.

Defects of the National Bank System. — The national bank system had for fifty years the sanction of the United States government. It was the banking system which obtained in this country as contrasted with the single bank system which obtains in other countries. As a banking system, it was never a complete success, and for some years prior to 1913 the demand for some kind of reform became more and more insistent.

The main objections advanced against the national bank system may be summarized under the following heads: its Origin, the Isolation of the Several Banks, Depositing of Reserves, the Congestion of Money in Money Centers, the Independent Treasury System, Inelastic Currency, and Lack of Banks in Many Districts.

1. The national bank system was the result of an emergency, — the government's need of funds and of a market for its bonds. The government had need of money to carry on the Civil War, and the state banks then in existence did not want the government bonds, which were fluctuating in value with every victory or defeat of the war. In 1863 the national banks were established with the obligation of taking a certain proportion of the government bonds. A banking system, if it would pretend to soundness and efficiency, ought not to be the outgrowth of a temporary necessity. It should be the result of a selective experience, of long and careful investigation and study of the special needs of the country.

2. Each bank was an independent unit, having its own interests distinct from the interests of all other banks, competing with its neighbors, and often ready to sacrifice its neighbors to save itself. There was no union whereby mutual support and aid might be extended from the stronger to the weaker in time of trouble. There was no community of interests that would serve to bind all together in one perfectly consolidated system, making the interests of one the interests of all, and inciting each to watch over the honor and integrity of the others.

Owing to this isolated character of the banks, a scheming

operator might have his notes discounted in different banks, without any one of the banks knowing about the accommodation granted by the others. When one bank, becoming aware of the flimsy nature of the security offered, called in its loan to a borrower, the borrower might pay back the loan with money borrowed from a second bank on similar uncertain security. Usually the first bank cared very little where its money came from, and was equally unconcerned about the risk incurred by the second bank, which might also grant the loan on unsafe collateral.

Again, in time of stringency, each bank would seek to draw in its own reserves, and in doing so it might often expose to imminent danger other banks that held these reserves. Each bank would naturally seek its own salvation, and would strive to increase its cash fund at the expense of every other bank.

3. Under the national bank system, up to 1913, the reserves of country banks could in great proportion be placed in reserve city banks, and half of the reserves of reserve city banks could be placed in central reserve city banks. This method of holding reserves presented no serious difficulty in an emergency or a money stringency which affected only a portion of the country or the banks of one city. In such a case, if a country bank in one town needed money, it might call on the reserve it had in the reserve city bank, and the money would be forthcoming and the difficulty would be tided over. But if the stringency affected a whole section of the country or the entire country, then, when the demand was made by country banks, the reserve city banks would lose much of their deposits and become so much weaker. They in turn would call on the central reserve city banks for the portion of their reserves deposited there, and the central reserve city banks would lose much of their deposits and become so much weaker. Thus, the weakening process would continue until the whole banking system was affected.

Indeed, that the reserves deposited in other banks could not properly be called reserves at all was the opinion of many authorities on finance. The panic of 1907 illustrated this fact.

" The Western banks, having large deposits in New York banks, began to draw against the latter, thereby diminishing the reserves of the New York banks; but, as the latter needed their own reserves quite as much as the Western banks needed theirs, the money stringency in New York soon reached the breaking point, and all the New York banks suspended cash payments. From the moment that such suspension took place, the deposits of the Western banks were of no use to them as reserves." (M. W. Hazeltine, " The Banking and Currency Problem in the United States," in *North American Review*, Feb., 1909.)

4. The reserve law which allowed banks to deposit a portion of their reserves in other banks caused a congestion of money in great money centers, and left the country banks devoid of the funds necessary to carry on business. These reserves deposited in other banks bore interest, and it was to the advantage of the country banks to deposit their money in the reserve banks, but the result often followed that business men in those country communities found it difficult to get the credit necessary to do business.

A view of the per capita capital existing in the various states at any one time will illustrate this fact. In 1896, the per capita capital in the national banks in several states was as follows:—

Maine	$ 45.88	Pennsylvania	$60.61
New Hampshire	41.85	North Carolina	4.98
Vermont	53.34	South Carolina	5.35
Massachusetts	120.59	Georgia	6.12
Rhode Island	117.21	Alabama	6.25
Connecticut	80.31	Mississippi	2.56
New York	86.18	Arkansas	2.72

(Cf. Handy, *Banking Systems of the World.*)

It is true that since 1896 there had been an increase in the number of national banks, the lowest amount of capital stock required having been reduced from $50,000 to $25,000. Yet the evil continued to exist.

5. The treasury system adopted in 1846 and followed under

the national bank system allowed the United States government to store away in its main treasury vaults in Washington and in the subtreasuries throughout the states a great mass of its wealth. The proceeds of taxation were thus abstracted in great measure from commercial uses. The people were deprived of the use of the money.

This system has been called a "revival of primeval times," when the barons stored their wealth in their castle vaults. The amount of money thus locked up and kept out of circulation averaged in past years $50,000,000. Had this sum been deposited in the banks instead of being kept in the treasury vaults, it would have been no less safe, for it might have been secured as other government deposits were secured. Had the government received even a 2 per cent interest on those sums, it would have been benefited to the amount of millions of dollars, and the banks would have had at their disposal for commercial credits a sum that would have allowed them to increase their loaning capacity to the extent of hundreds of millions of dollars. (*Practical Problems in Banking and Currency*, pp. 184, 204.)

6. The amount of money needed in circulation is a variable quantity. It will depend on the condition of trade and the extent of commercial transactions. The amount of money in a country may be great, but not all of it enters into circulation. Much of the actual money of the country is stored away in the government treasury, or in banks, in the form of reserves. Nor is actual money always needed for commercial transactions, since trade is carried on mostly through credits and credit loans supplied by the banks to the merchants.

It is stated on good authority that 92 per cent of all the business that passes through banks is done by means of credit. This statement is substantiated by reference to the operations of the clearing houses of the country, in which the balances settled in actual cash sum up about 8 per cent of the total yearly clearings. (Cf. *Practical Problems in Banking and Currency*, p. 227.)

Now, under the national bank system, in June, 1912, for example, the actual amount of money in circulation was:

Gold Coin	$ 610,724,153
Gold Certificates	943,435,618
Silver Dollars	70,339,574
Silver Certificates	469,224,400
Subsidiary Silver Coin	145,034,198
Treasury Notes of 1890	2,915,570
United States Notes	337,697,321
National Bank Notes	705,142,259
	$3,284,513,093

(Annual Report Secr. Treas., 1912, p. 152.)

Per capita — $34.34.

It was with this amount of money or with that part of it which was not tied up or used for other purposes, that the 8 per cent of cash business was carried on. The rest was done by credit.

Of the several items enumerated in the list, gold and silver, the Treasury notes, and the United States notes are fixed and determined. They cannot readily be increased or diminished. The national bank notes alone were capable of elasticity, and they should be susceptible of expansion and contraction in response to commercial needs. The banks stand midway between the money source and the merchants, and are necessarily in constant and close touch with commerce, through supplying loans, credits, discounts, and exchange.

Yet this very feature of elasticity was wanting in the national bank notes. The notes were based on United States bonds, in which each bank was obliged to invest a certain proportion of its capital. Now, the banks invested in bonds and issued notes against them, not through a desire to help trade or because of the needs of commerce, but because of the profit to be gained by the bond investment. (*Practical Problems in Banking and Currency*, p. 193.) To quote Horace White: "The principal defect of our national bank system is the rigidity of its note circulation. In a broad sense, the volume of notes

is regulated, not by the wants of trade, not by the amount or kind of commercial paper offered for discount, but by the market price of United States bonds." (*Ib.*, p. 266.)

At the beginning of the national bank system, bonds were a good investment, as their value was constantly increasing and they paid 5 or 6 per cent interest. The banks readily invested in them and the circulation of notes was large. Later, upon the redemption of these bonds, the circulation fell away. It increased again upon the issue of new bonds.

In the past, many banks drew their circulation down to the minimum required by law, "seeing more profit in selling the bonds at the premium they have commanded than in continuing circulation against them." (J. B. Forgan, in *Practical Problems in Banking and Currency*, p. 311.)

Moreover, the issue of notes secured by government bonds was open to the further objection that it is unwise to make the chief security for note circulation the security of the government. In case of war, the bonds representing the debt of a country are susceptible to violent depreciation. The United States bonds might fall very low. In the Boer war, the English Consols fell from 114 to 92. In the Civil War, the United States bonds could find no buyers, and the government had to organize the national bank system to create a market for them. Again, contemporary history shows how the values of all American securities, bonds included, fluctuate upon the agitation of every important political movement, such as the silver question, or revision of the tariff. The security and the solidity of government bonds as the basis of circulation were thus brought into doubt.

But to return to the question of elasticity. While the money circulation was rigidly fixed, the factors that created the demand for money were constantly growing or were subject to fluctuations. Among such factors were population, trade, and the seasonal demands for money incident to the moving of crops. It is evident that the circulating currency should be capable of expanding and contracting in pace with these factors.

Yet, the national bank circulation did not move with population, nor with the great expansion of trade, for while both these factors had increased immensely during the period when the national bank system was in force, there had been no corresponding increase in note circulation. The circulation, as we have seen, was mainly determined by factors wholly different from the factors here mentioned.

Again, every year a great strain was felt at crop-moving time, when immense sums of money were taken from the East to the South and West. In 1906, $200,000,000 was sent from the East to the West and South during the crop season. It was stated that Wall Street banks shipped 30 to 40 millions of cash to the West and South every fall. (Cf. Nat. Mon. Com., Doc. No. 588.) During recent years, the government has in part supplied the demand of agricultural regions by placing deposits of government money in western and southern banks.

Owing in great measure to the inexpansive nature of the circulating medium, this country has had its periodic panics.

Commercial crises came about upon the refusal of banks to give bank credits to merchants, and the banks were forced to refuse to give these credits or make further loans whenever their reserves reached the limit fixed and defined by law.

Monetary crises were experienced in 1860, 1873, 1884, 1890, 1893, and 1907. The banks were unable to render aid to the merchants and to prevent the many failures that spread over the country. The banks were obliged, in order to save themselves and their reserves, to have recourse to clearing house certificates. These certificates were based upon the credit and the assets of the banks that issued them. "The amount of the certificates issued by the clearing house in 1893, in the principal cities was upward of seventy millions of dollars." (W. B. Dean, in *Practical Problems in Banking and Currency*, p. 196.) In New York city alone, during the crisis of 1893, the clearing house certificates amounted to $41,490,000. (Report Comptr. Cur., 1909, p. 65.)

In the crisis of 1907, the total amount of clearing house

certificates issued was $248,279,700. New York city's issue reached $101,060,000. (*Ib.*) During the same crisis of 1907 "some of the railroads and individual corporations issued checks of larger or smaller denominations in making payments to their employees during the period of extreme stringency and while hoarding was still being practiced, and some of these checks passed current and acted as substitutes for currency for the time being." (Quotation in Rep't Compt. Cur., 1909, p. 64.)

Just as the currency could not expand in case of stringency, so also it was incapable of contracting in time of slack trade. When the demand for money had reached a low ebb, the currency accumulated in the vaults of the banks, and the banks were tempted to resort to every scheme to put their money out to interest, to "forced loans, inflated credits, cheap rates and other artificial methods to keep it employed and earning something." (*Practical Problems in Banking and Currency*, p. 310.)

7. The absence of banking facilities in smaller towns and rural districts has long been a much felt grievance. The national bank system, which was not at liberty to establish branches, could furnish no help. The reduction of the required capital of banks from $50,000 to $25,000, brought some relief, as it caused the establishment of many banks in regions within the reach of farmers, who previously could avail themselves of banking accommodations only at the cost of great expense and difficulty.

Remedies Proposed for the Evils of the National Bank System. — The defects of the national bank system just enumerated were recognized by all students of the question, and many remedies were proposed. Some of the remedies favored the establishment of a central bank; others, certain modifications of the actual system; and others, again, various innovations relative to note circulation.

1. The most radical remedy proposed was the reëstablishment of the United States Bank. The upholders of such a measure pointed to the systems obtaining in foreign countries — England, France, Germany, Russia, — and insisted that this coun-

try should adopt a system which had proved practicable and eminently serviceable in other lands. The experiment had already been tried and had proved successful.

The plan had many adherents throughout the country, even among prominent bankers. The New York Chamber of Commerce advocated a Central Bank. (Cf. *American Review of Reviews*, Jan., 1908; "Currency Reform: A Central Bank," R. E. Ireton.) There was, however, considerable opposition to such a proposal, principally because of the fear of political influence dominating the directors of a government bank.

2. A scheme that resembled somewhat the principle of the United States Bank was suggested by Lyman J. Gage, a former Secretary of the Treasury. It proposed a Federated Bank with a capital of $50,000,000. The stock of the Federated Bank would be subscribed to by all the national banks of the country. The Bank was to be controlled by a board of directors elected by the stockholding banks, and the government was not to be represented in the directory or official management of the institution. It was to be a bank of banks, receiving deposits from and doing business with its stockholding banks alone. The bank would exercise supervision over its stockholders, order examinations of its constituent banks as need might require, become the depositary of all government moneys, and have the power to issue circulating notes against its general assets. It would have the power to establish branches throughout the country. (A. B. Hepburn, in *Practical Problems in Banking and Currency*, p. 230.)

3. The Aldrich plan, drawn up at the suggestion of the National Monetary Commission (p. 218) by Nelson W. Aldrich, in Jan., 1911, outlined a banking institution to be known as the National Reserve Association of America. It was to have its head office in Washington, D.C., hold all government moneys, and be the principal fiscal agent of the government. Only national banks could subscribe to the capital stock of the National Reserve Association. The country was to be divided into fifteen districts. In each district a Local Association

was to be formed. The Local Association was to consist of at least ten banks, and have a capital of at least $5,000,000.

The National Reserve Association was to be governed by a board of 45 directors. The Secretary of the Treasury, the Secretary of Commerce and Labor, the Comptroller of the Currency, the Governor, and two Deputy-governors of the National Reserve Association were to be ex-officio members of the board. Each of the fifteen districts was to elect one director. Twelve other directors were to be elected by the banks in the fifteen districts subscribing to the National Reserve Association stock and located throughout the fifteen districts. The 27 directors thus elected were in turn to elect 12 more directors, "who shall fairly represent the industrial, commercial, agricultural, and other interests of the country, and who shall not be officers of banks. Directors of banks shall not be considered as officers." (Revised edition of the Aldrich plan, Oct., 1911.) No member of any state or national legislative body could become a member of the board.

The Local Associations were to be governed by boards of directors elected by the banks forming the Local Associations.

The functions of the National Reserve Association were to be as follows: To receive deposits of the United States government and of the national banks, members of any Local Association, but no deposits were to be received from individuals or private corporations, and no interest was to be paid on deposits; to purchase and sell government or state securities, securities of foreign governments, gold coin or bullion; to hold the cash of the United States government; to transact all the fiscal business of the government; to rediscount notes and bills of exchange for the banks belonging to the Association; to fix the rate of discount, which was to be uniform throughout the United States; to make loans; to deal in bills of exchange on foreign countries; to establish bank agencies in foreign countries; to issue circulating notes.

"All note issues of the Reserve Association must be covered to the extent of at least one third by gold or other lawful

money, and the remaining portion by bonds of the United States or bankable commercial paper as herein defined or obligations of the United States." The notes were to constitute a first lien upon the assets of the National Reserve Association.

The earnings of the National Reserve Association were to be distributed as follows: The stockholding banks were to receive 5 per cent in cumulative dividends. Of the remainder, part was to be paid into a surplus fund of the National Reserve Association until the fund reached 20 per cent of the paid in capital, and the rest was to go to the government.

A weekly report was to be made by the Reserve Association to the Comptroller of the Currency. The report was to be made public. (See National Monetary Commission, Doc. No. 784.)

Other remedial plans, not so drastic as the preceding, consisted in allowing national banks to retain their original constitution, but would give them the power to establish branches, or would establish a government guarantee of bank deposits.

4. The first proposal was to allow national banks to establish branches in the smaller towns throughout the country. The main bank would hold the reserves as required by law, and would direct the operations of its branches, sending or withdrawing funds as the need of trade might require. National banks are not at liberty to transact banking business except "at the office or banking house located in the place specified in their organization certificate." (U. S. Revised Statutes, Sec. 5190.) No branches are allowed in this country.

The method of branch banking exists in most foreign countries. England has 129 great banks with 5500 branches. The Bank of France has 392 branches. The Imperial Bank of Germany has 320 branches. Canada has 29 banks with 2200 branches. The ten banks of Scotland have 1065 branches. (Cf. *Annals of the American Academy of Political and Social Science*, Nov., 1910, p. 60.)

The advantages claimed for the establishment of branch banks

by national banks were — that it would grant banking facilities to districts too poor to support a bank; it would stimulate enterprise in industrial pursuits; it would absorb the capital that at present lies hoarded in idleness; it would grant accommodation to customers trading in different sections of the country; it would indirectly remedy the rigidity of note circulation, as the main bank could loan its notes at the branches and redeem them at the main office — there would be no need of transporting capital to the branches for the redemption of the notes; it would bring about a chain of mutually helpful banks and do away in part with the evil of isolation; it would limit the amount of reserves if combination were made between the weaker and the stronger banks; it would prevent in great measure the congestion of money in special localities; it would lower and equalize the interest rate of money.

Notwithstanding these advantages, there were many who objected to branch banking, and their objections were mainly of the following nature: (1) branch banks would draw away all the money from the small towns and use it in large cities; (2) large city banks would send so much money into the small towns through their branches and would lend at such low rates that existing banks could not make a living; (3) if branches were permitted, all the banks would be consolidated into a gigantic trust, so that nobody could get any money except on terms dictated by a few powerful magnates; (4) the branches would be without capital and would be free of taxation.

5. Another plan suggested was a government guarantee of bank deposits. It was claimed that the immediate cause of all money panics that ever existed was the loss of confidence on the part of depositors in the banks holding their deposits. In times of prosperity, confidence is prevalent everywhere. Without hesitation individual depositors place and leave their money in the hands of bankers, and banks place and leave their deposits in reserve banks; but let there appear the slightest indication of weakness on the part of any banking institution, any slightest indication of inability to meet demands for money deposited,

and at once a panic arises and spreads with lightning rapidity. A run is made on a bank; the bank closes its doors; the contagion spreads; there is a scramble on the part of banks to secure their reserves, on the part of corporate and individual depositors to secure their deposits; money is gathered in and hoarded; stagnation falls on all the financial and business world, and the spectacle is seen of all the banks in the country actually closing their doors and going out of business. Such was the picture offered in the panic of October, 1907.

Now, if the evil could be met in its initial cause, if that cause could be obliterated, there would be no resultant evil. If a plan could be adopted that would do away with that panicky fear of the depositors, that wild, unreasoning dread for the safety of their deposits — a plan that would prevent the senseless scramble for and hoarding of money — that plan would afford a remedy for money stringencies and money panics such as our country witnesses periodically.

Such a plan, it was claimed, existed in the government guarantee of bank deposits. Let such a guarantee exist, and then no depositor would doubt the security of his deposit, nor would he seek to obtain possession of it for its greater safety.

The plan was as follows: It was proposed that all the national banks of the country should contribute a specified percentage of their average yearly deposits to a deposit guarantee fund. At the end of five years enough would be contributed to allow the guarantee feature of the scheme to become operative. Whenever a national bank failed, the depositors would be paid in full out of the guarantee fund. The Comptroller of the Currency would take over the estate of the failed bank and liquidate its affairs. Whatever assets were possessed by the bank would be used to pay the cost of settlement, and to make good the draft made upon the guarantee fund. (*The American Review of Reviews*, Mar., 1908, "Shall Bank Deposits be guaranteed?" General A. B. Nettleton, p. 343.)

Certain accessory legislative measures would be required to safeguard the united interests of all the banks, such as

limitation of the maximum amount of deposits any one bank could receive in proportion to its unimpaired capital; limitation of the rate of interest payable on deposits, with a view to protect conservative banks from unfair competition of smaller and unscrupulous banks; the prevention of chains of banks under one ownership, and of the borrowing of banks' funds by officers of the banks; the elimination by the Comptroller of dishonest and incompetent bank officials.

The main objections made against the system were the following: (1) It would tend to make the national banking system a huge political machine, leading to favoritism and concentration of power in the federal government. (2) It would savor of paternalism and socialism, repressing individual effort. (3) It would put good and bad banks on a level and destroy all incentive for sound banking and efficient management. (4) That the banks needed no guarantee was shown by the fact that deposits of failed banks since the beginning of the national bank system had aggregated only one twenty-sixth of one per cent of all the deposits of the banks. (5) It would lead the way to bad banking, since it would impair the feeling of individual responsibility, and would encourage depositors to make no discrimination between sound and unsound banks, thus destroying the force of the popular demand for careful management and safe methods — the government being bound to make up the losses incurred by unwise and haphazard operations. (6) It would be unjust to make strong and sound banks responsible for unsound and weak banks, without at the same time giving the strong banks any power of control or direction over the weak banks.

Various remedies affecting the issue of circulating notes were proposed in an attempt to make the circulation more elastic and responsive to the demands of trade. The remedies related to asset currency and emergency currency.

6. The general feature of the many forms of asset or credit currency proposed was that banks should have the power to issue notes based not on United States bonds, but on the assets of

the banks. There were usually several safeguards attached, such as the establishment of a guarantee fund contributed by each bank proportionately to its capital or to its issue of notes, the obligatory redemption of notes by each bank when presented, a tax on the notes increasing with the increasing amounts of the notes issued, the making the notes a first lien on the assets of the bank and upon the stockholders' liability.

Credit currency, with various modifications and greater or less limitations, had been proposed by the Indianapolis Monetary Commission, convened previously to 1900, by the American Bankers' Association Commission, assembled in Washington, D.C., in 1906, by the Fowler bill and other bills in Congress, by Secretary Gage of the Treasury in 1897, and by a host of prominent bankers and financiers.

The advocates of asset currency pointed out the fact that foreign countries have adopted this method. The Bank of France, the Bank of Austria-Hungary, the Imperial Bank of Germany, the Bank of Belgium, the Bank of the Netherlands, the Bank of Scotland, the Canadian banks, and many others, all issue circulating notes on their business assets. (*Practical Problems in Banking and Currency*, p. 203.)

It was further argued that much of the business of banks was already done through credit instruments, cashiers' certificates, certificates of deposit, drafts, and checks. A currency founded on assets is founded on the natural resources of the country and is fitly called a natural currency. It was declared to be the only scientific method of banking, because "the circulating medium is the instrument of business transactions, and should be developed out of them and governed by them." (*Ib.*, p. 201.)

Such a currency would be certain of payment, because safeguarded by a guarantee fund; it would sever the relation between the currency circulation and the government, because the note circulation would no longer be based on government bonds; it would set the circulating notes free from the influence of the political operations of the government and the market price

of government bonds. (Cf. W. B. Dean, in *Practical Problems in Banking and Currency*, p. 201; cf. V. Morawetz, *The Banking and Currency Problem in the United States;* cf. *North American Review*, Feb., 1909, p. 242.)

A currency based on bank assets would assume a certain amount of risk, since it is based on the probability that only a small percentage of banks would fail, but the past history of national banks would justify the assumption of the risk. It had been calculated that an average tax of one fifth of one per cent on the total note circulation in all the years since the inception of the national bank system would have covered all the notes of all the banks that failed during that period. (*Practical Problems in Banking and Currency*, p. 200.)

Insurance companies, it was further pointed out, were doing business of immense extent upon the theory of probability. The insurance policies outstanding against any of the great insurance companies could not be redeemed were they to be presented to-morrow for redemption. Still the safety of the policies is not questioned, and the premiums are regularly paid and the insurance officers are extending their business, on the assumption that the lives of men will be, according to the law of probabilities, of a definite length on the average, and that accidents destructive of life will be, according to the same law, of only a definite frequency of occurrence.

7. Emergency currency means a currency that would increase in amount in time of need, to be withdrawn after the crisis had passed. Several plans were proposed. They all practically meant the issue of notes by the banks to a certain per cent of the outstanding circulation, based on the assets of the banks or on certain safe bonds and bills receivable of the banks, these notes to be taxed 5 or 6 per cent yearly, to insure their withdrawal when the crisis had subsided. (Cf. *Practical Problems in Banking and Currency*, p. 308, Pugsley's plan; *North American Review*, Mar., 1906, p. 380, Secretary Shaw's plan.)

An emergency currency law, known as the Aldrich-Vreeland Act, was passed, May 30, 1908.

It provided for the creation of National Currency Associations, one such Association to be established in each city, and to be composed of at least ten national banks, having an aggregate capital and surplus of at least $5,000,000.

Any bank in a National Currency Association acting through the Association could issue circulating notes based upon commercial paper representing actual commercial transactions. Circulating notes could, moreover, be issued by any national bank upon deposit with the Treasurer of the United States of bonds other than United States bonds; bonds, for example, of a state, a city, a town, or a county, within the United States.

A redemption fund of 5 per cent of the additional circulating notes must be kept by the banks in the hands of the Treasurer of the United States. To insure the withdrawal of circulating notes when no longer needed, notes based on other than United States bonds were taxed at the rate of 3 per cent per annum for the first three months, and one half of one per cent per annum for each additional month until 6 per cent per annum was reached, which rate was to continue while the notes were out. (See Amendment in Federal Reserve Act of 1913.)

The law was only a temporary measure and expired on June 30, 1915. It was at first thought that little use would be made of the provisions of the emergency law, but upon the breaking out of the European war in August, 1914, currency conditions became such in this country that recourse to the law was necessary to save the country from the serious money stringency that threatened. On Aug. 4, 1914, an amendment to the emergency act was passed giving the Secretary of the Treasury power to suspend certain limitations imposed by the act, and to increase the amount of emergency currency that could be issued by banks. The amount of emergency currency issued under the law aggregated about $380,000,000. Since the institution of the federal reserve system, the greater part of this currency has been withdrawn, owing to the low rates of discount prevailing at the federal reserve banks, and to the constantly increasing tax imposed on outstanding emergency notes.

By the same law of 1908 a National Monetary Commission, composed of nine senators and nine representatives, was established to advise permanent amendment to the existing laws of banking and currency. The labor of the Commission resulted in the federal reserve system.

5. **Federal Reserve System.** — The federal reserve system was introduced by the Federal Reserve Act, passed Dec. 23, 1913.

An Organization Committee composed of the Secretary of the Treasury, the Secretary of Agriculture, and the Comptroller of the Currency was empowered to divide the territory of the United States into not less than eight and not more than twelve federal reserve districts. A federal reserve bank is instituted in some city in each district. All the commercial banks within a district may become member banks of the federal reserve bank. The whole system of federal reserve banks is controlled by a Federal Reserve Board, composed of the Secretary of the Treasury and the Comptroller of the Currency, who are ex-officio members, and five other members appointed by the President of the United States with the approval of the Senate.

On April 2, 1914, the Organization Committee announced the division of territory into districts and the selection of federal reserve cities, as follows: District 1, Boston, Mass.; District 2, New York, N.Y.; District 3, Philadelphia, Pa.; District 4, Cleveland, O.; District 5, Richmond, Va.; District 6, Atlanta, Ga.; District 7, Chicago, Ill.; District 8, St. Louis, Mo.; District 9, Minneapolis, Minn.; District 10, Kansas City, Mo.; District 11, Dallas, Tex.; District 12, San Francisco, Cal.

The members of the Federal Reserve Board took the oath of office on Aug. 10, 1914, and thereafter the organization of the federal reserve system was rapidly completed. On Nov. 2, 1914, the member banks paid in the first installment of capital stock, and, finally, on Nov. 16, 1914, the opening of the federal reserve banks took place.

The federal reserve system was instituted for the purpose of remedying the evils incident to the national bank system. A study of the history of banking and currency in the United

States will enable the observer to note the trend of events and experiences which have led to the establishment of the federal reserve system. The failures as well as the successes of past experiments, the evil as well as the good which were found in methods previously tried, all exerted an influence upon the minds of those who formulated the new system.

The partisanship and the political influence which were apparent in, and brought ruin to, the second United States Bank; the need of a responsible institution capable of becoming the fiscal agent of the government; the danger of too great centralization of power in a central banking system; the inflation and speculation that were rampant under the control of the state banks; the withdrawal of money from commerce that prevailed under the independent treasury system; the isolated condition of the banks, inadequacy of the reserve system, congestion of money in reserve centers and lack of money in many districts, dependence of circulating notes upon United States bonds, and inelasticity of currency in times of money stringency, which were the main defects of the national bank system, — all of these features stood out as the lessons of the past and directed the selection of the provisions of the Federal Reserve Act.

Under the federal reserve system, the banks are consolidated and made mutually helpful; centralization of capital and congestion of money in great financial centers are avoided by the districting of United States territory; the withdrawal of funds from commerce is precluded in the provision by which the independent treasury system is abolished, and federal reserve banks are made the ordinary depositaries of government moneys; governmental responsibility for banking methods is secured by the presence of government officials and presidential appointees on the Federal Reserve Board of directors; the fear of the entrance of politics and partisanship is allayed by the large number of directors on the boards of the federal reserve banks, and the limitations on the President in the appointment of the directors of the Federal Reserve

Board; the elasticity of the currency is sought by making circulating notes dependent on the various forms of assets held by the banks and representing actual commercial transactions, and the redemption of circulating notes by the reserve banks through which they are issued; the inadequacy of the reserves under previous methods is remedied by the location of a certain proportion of the reserves in the federal reserve banks; the lack of banking facilities in many sections of the country is sought to be corrected by the establishment of branches of federal reserve banks in various cities throughout each federal reserve district, whereby the benefits of the central banks may be more largely diffused.

QUESTIONS

1. When and where did banking originate in the world? Mention the principal banks of earliest times. What countries have government banks?

2. Describe the first Bank of the United States; the second Bank of the United States.

3. What is the independent treasury system? When did it begin?

4. Give a brief account of state banks in the United States.

5. When did the national bank system begin? What was the cause of the institution of the national bank system?

6. Enumerate the defects attributed to the national bank system.

7. Explain each of the defects in detail.

8. What remedies were proposed for the alleged evils of the national bank system?

9. Explain each remedial measure in detail.

10. When was the federal reserve system instituted? Mention the federal reserve cities. When were the federal reserve banks opened?

11. How has the federal reserve system sought to remedy the defects of previous banking systems?

CHAPTER XII

POSTAL SAVINGS BANKS. LAND BANKS. BANKING SYSTEMS OF SOME OTHER COUNTRIES

Postal Savings Banks. — The government already has an admirable system of collecting and distributing the mail. There is a post office in every corner of the United States possessions, directed by competent officials, who are responsible to the United States government and for whom the United States government is responsible. The establishment of postal savings banks adds to the duties of these many officials the duty of receiving the deposits of the people.

The system was first introduced in England in 1861, and since that time it has been adopted by nearly every nation of the world. The United States adopted it in 1910.

The following table shows the activity of the system in the principal foreign countries: —

Country	Date	Number of Depositors	Deposits	Year when Established
United Kingdom	1912	12,370,646	$859,027,319	1861
Canada	1912	146,310	42,683,232	1868
France	1912	5,970,929	328,890,226	1881
Italy	1912	5,777,206	361,433,560	1875
Belgium	1908	2,200,000	141,000,000	1870
Russia	1907	1,788,000	128,000,000	1889
Japan	1912	11,950,158	91,896,942	1875
Austria	1912	2,261,658	46,317,746	1883
Hungary	1912	823,251	23,653,855	1886
Netherlands	1911	1,540,481	66,857,424	1881
Sweden	1912	565,759	12,645,957	1884

(Nat. Mon. Com., Doc. No. 658; Stat. Abstr., 1912, p. 811.)

The system works well where introduced. It encourages thrift and the spirit of saving among the classes, even among the poorest, since deposits are invited from all sorts of persons. Because the government guarantees the safety of the deposits, the system appeals to the great mass of the people, who have absolute trust in the government, when they might become suspicious of even the most solidly founded private corporation.

The sum with which a deposit may be started is very small, — a shilling in England, a franc in France, — but provision is made for even the smallest sums by the issue of cards to which stamps of the value of the smallest current money may be affixed, and when the stamps amount to about twenty cents, the cards may be deposited and an account opened. In Austria, over half the depositors are under twenty years of age. In England, 50 per cent are women and children. (Cf. *Annals of the American Academy of Political and Social Science*, Nov., 1910, p. 174.)

In England and France, the funds collected are invested in government bonds. In other foreign countries, the funds may be invested in other than government bonds; for example, in municipal bonds, or in mortgages on real estate.

For some years the question of the establishment of postal savings banks in the United States was frequently discussed. The adoption of the system appealed to the people, and in the presidential election of 1908 the platforms of all the parties advocated the measure.

Soon after the election, the subject came up in Congress, and, after much discussion, the Postal Savings Bank Act became a law, June 25, 1910.

The Act instituted a Board of Trustees composed of the Secretary of the Treasury, the Postmaster-general, and the Attorney-general, which makes all rules and regulations for carrying out the law.

The Postmaster General designates the post offices which may become depositaries of postal savings. (See Amendment, Aug. 24, 1912.)

Any person may deposit in the postal savings banks sums not less than one dollar. Stamps, however, are provided for smaller sums.

Deposits by any individual may reach the sum of $2500 (Amendment of 1918). Interest on the sums deposited is paid at the rate of 2 per cent per annum. Deposits are payable on demand.

The money deposited in postal banks is redeposited preferably in member banks of the Federal Reserve System in the locality where the postal-savings are made, but if member banks do not exist in the locality, or, if existing, refuse to receive the deposits, then the deposits may be placed in any bank in the locality or in a bank most convenient to the locality, after such bank has qualified to receive the deposits. Funds so deposited draw $2\frac{1}{4}$ per cent interest. (Ib.)

Five per cent of the deposits in postal banks is retained in the national treasury as a reserve fund. Thirty per cent may be invested by the Board of Trustees in government bonds, and the whole amount of deposits may be invested in government bonds at the discretion of the President.

Depositors in postal banks have the privilege of exchanging their deposits in amounts of $20 and multiples thereof for $2\frac{1}{2}$ per cent United States postal-savings registered or coupon bonds. Such bonds are not counted as a part of the maximum of $2500 allowed to a depositor. The bonds are bought at par and are redeemable at par.

The most evident advantages of the postal savings bank system are as follows:

1. It furnishes a safe means for the small savings of the poorer classes.

2. It encourages the spirit of saving by reducing to the minimum the obstacles and inconveniences that prevent saving.

3. It prevents hoarding and brings into circulation an immense amount of money needed for commercial transactions.

4. It tends to encourage persons to put money in savings banks, for when the habit of saving is formed and a rather

large sum has been collected in the postal savings bank, the depositor may be induced by reason of the higher rate of interest paid by the savings bank to transfer his deposit to the latter institution.

5. If, in time of panic, money be withdrawn from other banks, some of it will in all probability be placed in postal savings banks. This can be returned to the banks by the government, and money will flow back into circulation, thus possibly preventing a money stringency.

The postal savings bank system has spread rapidly over the whole country. On June 30, 1920, there were 6314 postal savings depositories. The number of depositors reached 508,508, and the amount of deposits, $157,276,322.

A noticeable fact, since the introduction of the system, is that the amount of money sent abroad for deposit in foreign postal banks has considerably diminished.

Federal Land Banks and Joint Stock Land Banks. — The Federal Land Banks and the Joint Stock Land Banks were established to help the farmers. For a long time the farmers and would-be farmers were subjected to many inconveniences in their efforts to improve or to acquire land. Exorbitant rates of interest were charged by banks for the money advanced to farmers for the marketing of farm products. Land monopolies through their large capital funds secured possession of the best lands, and many prospective farmers with small capital found it impossible to acquire land. To stimulate agriculture, to encourage coöperation among farmers, and to enable persons with little money to own and to cultivate land, the Farm Loan Act was passed on July 17, 1916.

A Federal Farm Loan Bureau under the supervision of a Federal Farm Loan Board was established in the Treasury Department.

The continental United States, excluding Alaska, was divided into 12 districts, and in each district was organized a Federal Land Bank with a capital of $750,000.

The Federal Land Bank loans money to bona fide farmers on

first mortgages on farm land within the district. The loan, however, is made not directly to the individual farmer but through the intermediary of National Farm Loan Associations, which are formed within the district. Ten or more borrowers form an association and subscribe to the capital stock of the association. The association indorses the loan applications and subscribes to the capital stock of the Federal Land Bank. The loan is made by the bank to the association and through the association to the individuals who are shareholders in the association. The loan, which may be for not less than $100 and not more than $10,000 to any one borrower, is made for not more than 50% of the value of the land, must be used for agricultural purposes exclusively, and is payable through an amortization plan in a period of not less than five and not more than forty years.

The funds that supply the loans are obtained in part by the deposits of the farmers and associations in the Land Banks, and in part by the sale of Farm Loan Bonds.

The bonds are secured by the capital, reserves, and earnings of the issuing bank and of all the other Land Banks, as well as by the indorsed first mortgages on farm lands equal at least in amount to the bonds issued. The bonds are non-taxable, and are a legal investment for trust funds and security for public deposits.

Joint Stock Land Banks, with a capital of $250,000, can make loans to farmers on first mortgages and can issue bonds. The loans made by the Joint Stock Land Bank are not subject to the conditions imposed on loans granted by the Federal Land Banks. The individual may obtain a loan on first mortgage directly from the Joint Stock Land Bank without joining a National Farm Loan Association, and is not restricted in the use of the loan, the location of the farm land, the method of payment, or the amount of the loan.

The progress made by the system since its inception to Sept. 30, 1920, is shown by the following: —

	Number	Amount
Net Loans applied for	177,019	$540,578,500
Net Loans approved	139,189	383,234,988
Loans closed	130,720	366,646,914

(Treas. Depart. Federal Farm Loan Bureau.)

As is evidenced by the preceding table, the Land Banks have proved a great benefit to the farmers.

Banking Systems of Some Other Countries. — *England.* — The Bank of England, started in 1694, was the only joint stock bank in England until 1826, and the only joint stock bank in London until 1835. By the Act of 1844, it was divided into an Issue Department and a Banking Department, and given the sole right to issue circulating notes.

The Issue Department of the Bank was allowed to issue notes against its securities. In 1897 the issue amounted to £16,800,000 against securities, and £36,411,000 against coin and bullion on hand. The notes of the Bank are practically gold certificates, being now secured by actual gold in the vaults of the Bank. This gives absolute security to the notes. This fact prevents hoarding, an evil than which there is none greater, as may be seen in times of unreasonable panic.

By law the Bank is allowed to issue only a certain amount of notes against its reserve, but in case of need the Bank Act is suspended and the Bank of Issue can then put out notes beyond the amount of securities. In the panic of 1847, there was danger that through repeated demands on the Bank, the cash reserve would be exhausted. Thereupon the government advised the Bank to disregard the Bank Act and to issue notes to meet the emergency. In 1866, on May 11 (Black Friday), the same course was followed and in a short while from a state of indescribable frenzy affairs returned to the normal.

The Banking Department of the Bank of England acts as the banker of the government in the management and payment of interest on the national debt, the issue and withdrawal of Exchequer bills and bonds, the issue of government loans, and other banking operations.

It is the bank of deposit and the clearing house of the world. It is the clearing house of the other banks and holds the reserves of all the other banks in Great Britain.

It is not obliged to hold any cash reserve against its deposits.

The Bank of England gives no interest to other banks for the

money it receives from them, and hence it is not surfeited with money in easy times.

To protect itself against a too great withdrawal of its funds, the Bank of England raises its rate of discount. The effect of this is to stop borrowing and to draw money to itself.

The Bank of England is out of politics.

The chief defects of the English system are that much money is kept idle in the vaults of the Bank of England, and that currency is inelastic.

France. — The Bank of France was founded by Napoleon I in 1800. Since 1806 it has had the monopoly in Paris of issuing notes, and in 1848 the monopoly was extended to all France. It is a private concern, but the government stands behind it and supervises it.

The governor and deputy governor are appointed by the state. The Bank carries out the treasury operations of the government.

All the banks in France are branches of the Bank of France.

The Bank may issue notes to the extent of five billion francs, guaranteed by its assets.

Germany. — The Imperial Bank of Germany was organized in 1875. It has practically the monopoly of note issue. By the Act of 1875 it was allowed to issue uncovered notes to the amount of 250 million marks. The issue was later extended to 470 million marks.

The issue is based on the assets of the bank. In case of business crises it may issue notes beyond the amount stated, but then one third must be secured by cash or its equivalent. A 5 per cent tax is paid for the extra issue. Hence there is elasticity of currency. Stringencies were thus relieved in 1881, 1882 (twice), 1889 (three times), 1890 (twice), 1893 (twice). The government controls the bank. (See Hepburn, *Contest for Sound Money*, p. 428.)

Canada. — The banking system of Canada was the result of experiment and consultation. The legislation affecting banking was codified in 1870. Each bank must have a subscribed capital

of $500,000. Two hundred and fifty thousand dollars must be paid up and deposited in the hands of the Minister of the Treasury, who returns all but 5 per cent. The latter sum forms a guarantee fund for the safety of the circulating notes, and is called the " circulation redemption fund."

The present banking act became operative in 1891. There is a government examiner for each large bank, and a monthly statement must be made by each bank.

A bank may issue notes to the amount of its capital stock, and no reserve is kept on hand. The notes cannot be of less denomination than $5, and are mere credit instruments based on the assets of the bank. As a matter of fact, the issue has never been more than 50 per cent of the bank's capital.

By amendment to the Banking Law (July 20, 1908) a bank is allowed to issue an emergency circulation during crop-moving time (Oct. 1 to Jan. 31). The emergency notes may equal the amount of the paid-up capital plus 15 per cent of its combined paid-up capital and surplus fund. Emergency notes above the amount of the paid-up capital are taxed at a rate not to exceed 5 per cent per annum. (J. F. Johnson, in *Annals of the American Academy of Political and Social Science*, Nov., 1910, p. 64.)

The notes are a first lien on the assets of the bank, and a double liability on the shareholders.

The notes of an insolvent bank bear interest at the rate of 5 per cent from the date of the suspension of the bank. The government must pay them if they are not paid in sixty days by the bank. They are perfectly secure. The notes lack legal tender quality. Each bank watches over the actions of all other banks, and refuses their notes if the slightest weakness is manifested. Each bank must give statements of its condition to the other banks.

The greatest elasticity obtains. Notes are sent back to each bank for redemption. The circulation varies 15 per cent in the course of a year. There is no inflation. The notes of each bank must be redeemed at clearing houses in definite redemption cities, which are the same for all the banks. These

redemption cities are Montreal, Toronto, Halifax, Winnipeg, Victoria, St. John, Charlottetown.

Each bank may have its branches, and no restriction is made as to the number or location of the branches. The branches numbered 2200 in 1910. The advantage of the branches is great. When a stringency occurs in one section, the branch bank may have the assistance of the main bank and all its branches.

The banks demand from time to time a confidential statement from each of their customers as to the condition of his affairs, his assets and his liabilities. Such a customer cannot impose on other branch banks of the first bank, since his financial standing is known.

The officers of a bank are not allowed to participate in any way in the borrowing of money from their banks.

Scotland. — The Scotch banking system is often referred to as the ideal system of banking. Free banking with freedom of note issue existed in Scotland up to 1845, when the note issue was restricted. From that date no new bank of issue could come into existence, and the existing banks could keep up their circulation as it then stood and issue additional notes upon deposit of coin. The authorized circulation was and is to-day £2,676,350. This amount is uncovered by any reserve. The circulation covered by coin deposits probably averages about £5,000,000 more.

Since the limiting law of 1845 was passed, the elasticity of the currency has not been equal to what it was before, but it suffices for the country. The expansion needed can be accomplished by the issue of notes on coin deposits, which deposits may be obtained from the Bank of England. The contraction is brought about by each bank returning through the clearing house the notes of all other banks and receiving its own notes in exchange, when each bank may cancel its own notes and thus reduce the amount of circulation.

The notes of Scotch banks may be of lower denominations than £5. The Bank of England has no notes less than that amount.

There are ten principal banks of issue in Scotland, but they

have over 1000 branches, distributed throughout the small towns, thus conveying banking facilities to all the people. The effect of this has been of great economic value, encouraging as it does thrift and the spirit of saving among even the poorest classes.

Scotland has one bank or branch bank for every 4000 of population. England has one for every 10,000, while the United States has one national bank for every 13,000 (1920).

The deposits in Scotch banks amount to between $400,000,000 and $500,000,000, with a population of about 4,000,000.

An important advantage of branch banking consists in the facilities the system offers to customers of any main bank of conducting business with cities where it has branches.

One feature peculiar to Scotch banking is the granting by the banks of cash credits. Two responsible men may go surety for any poor but honest man, who lacks only money to secure a comfortable home or to carry on his business. Through his sureties he obtains a cash credit on a bank, drawing out portions of the sum as needed and paying in what sums he may realize in his business. Many a successful business man has started with a cash credit.

The banks pay interest on deposits. The desire to gain such interest and the existence of bank branches in every smallest district of the country result in bringing into active productive industry every portion of available capital.

QUESTIONS

1. When were postal savings banks first instituted? When was the system adopted in the United States?
2. Explain the postal savings bank system as it exists in the United States.
3. What are the advantages of the postal savings bank system?
4. Explain the federal farm loan banks, and the joint stock land banks. How do they benefit the farmers?
5. What are the main features of the banking systems of England? Of France? Of Germany? Of Canada? Of Scotland?
6. What special advantages are possessed by foreign banking systems?
7. In what measure does the federal reserve system of the United States possess these advantages?

CHAPTER XIII

INTERNATIONAL TRADE. BALANCE OF TRADE AND BALANCE OF ACCOUNTS. CUSTOMS DUTIES

I. International Trade

Causes. — International trade is trade between nations. It is due to the need a country has for the products of other countries, and to the need a country feels for markets more numerous than can be found at home for its own products.

Every country requires the help of other countries for its supplies of necessaries, comforts, and luxuries, and the productive activity of every country results in an output greater than is necessary for home consumption. Hence the interchange of products between different countries.

A country will require some commodities that it cannot produce. Moreover, it will find it advantageous to buy from foreign countries some commodities that it could produce itself if necessary. Thus, while the United States produces a certain amount of sugar, and could possibly produce all that it needs, it is to our advantage to import the great bulk of our sugar. Other countries having greater facilities for the production of sugar can produce it at less cost, even calculating in that cost the rate of transportation; and the capital and labor which would be employed in the production of that commodity in the United States will be better employed in the production of some other commodity.

International trade is influenced by the difference between domestic and foreign prices. When prices are higher abroad, merchants will send their goods abroad; when they are higher at home, merchants will find markets at home.

Trade between countries is Export trade, when goods are sent out of the country; Import trade, when goods are brought into the country.

Effects. — International trade brings nations into close intimacy and arouses a spirit of competition which becomes an incentive to world production. All nations are rivals, but whereas in past centuries the rivalry was exerted with a view to gaining territorial and political supremacy, and was carried on by wars and bloodshed, to-day the rivalry is confined to gaining commercial supremacy, and is carried on by more peaceful means — better products, more attractive display of goods, the genius of invention, advertising, timeliness of the appearance of commodities upon the markets.

Foreign commerce may become in the hands of a nation a powerful weapon with which to inflict serious injury upon another nation. Favoritism, discrimination, and injustice may be practiced by one country towards another in commercial transactions, and may arouse intensely bitter feelings, that can open the way to serious international difficulties.

International commerce may, at the same time, be an effective means of checking the encroachments of too aggressive nations, and of bringing about the adoption of just and fair treatment. This will prove to be the case especially between nations having protective tariffs, through which advantages may be granted or discriminations made in their mutual commercial relations.

Exchange among individuals is the result or complement of division of labor. This holds true for international trade in great measure. Here the division of labor is of course that world division of labor described before, whereby nations may apply themselves more or less exclusively to the production of those commodities for which they possess special natural advantages.

Advantages. — The advantages of international trade are many. In addition to those already suggested, some of the more special advantages may be enumerated as follows: —

Advantages of Importation: (1) Additional well-being of the

country, in receiving commodities which it could not produce itself. Thus, Holland receives building stone; Switzerland, coal; Norway, tropical fruits; England, lumber and wine; France, copper; the United States, rubber. (2) Economy of labor in buying things which can be produced more cheaply abroad than at home. This may happen when one nation is inferior to another in raw material, or has a higher scale of wages. Even when the country is rich in raw material, the facilities for production in a foreign country may be greater, as, for example, when coal is nearer to the operating plants and more abundant in the foreign country. (3) Help from other nations when the home products fail through accident.

Advantages of Exportation: (1) It utilizes national resources and productive forces. (2) It develops a nation's industries — finds markets. (3) It furnishes markets abroad where much of the material produced at home may be disposed of after demand has ceased for it in the home markets.

Extent of International Trade. — The commerce of the United States with foreign countries is enormous. The following table shows the imports and exports in recent years, in millions of dollars: —

Year	Imports	Exports	Imports and Exports	Excess of Exports
1913	1,813	2,465	4,278	652
1914	1,893	2,364	4,258	470
1915	1,674	2,768	4,442	1,094
1916	2,197	4,333	6,531	2,135
1917	2,659	6,290	8,949	3,630
1918	2,945	5,919	8,865	2,974
1919	3,904	7,920	11,824	4,016
1920	5,278	8,228	13,506	2,949

(Stat. Abstr., 1920, p. 397.)

The domestic agricultural exports of the United States expressed in percentage of all domestic exports were as follows: —

1913	46.3%	1917	31.6%
1914	47.8	1918	38.5
1915	54.3	1919	53.0
1916	35.5	1920	42.9

(Stat. Abstr., 1920, p. 776.)

United States exports of manufactures have been in relation to all domestic exports: —

1890	21%
1900	35
1910	44
1920	51

(Stat. Abstr., 1920, p. 785.)

Following is a table showing the commerce of some foreign countries for comparison, in millions of dollars: —

	Year	Imports	Exports	Imports and Exports	Excess of Imports	Excess of Exports
Canada	1920	1,064	1,239	2,303		175
France	1919	5,747	1,681	7,428	4,066	
Germany	1913	2,563	2,403	4,969	160	
Italy	1919	3,187	1,001	4,188	2,186	
Mexico	1918	88	198	286		110
Japan	1919	1,074	1,028	2,102	46	
United Kingdom	1920	9,425	6,499	15,924	2,926	

(Stat. Abstr., 1920, p. 838.)

Domestic Commerce. — As shown in the preceding tables, the foreign commerce of the United States in 1920 amounted to $13,506,000,000, and is surpassed only by that of the United Kingdom.

With regard to foreign commerce, it must be said that the United States, with its wealth of natural resources, of raw material and foodstuffs, its great systems of railroads, and the business genius of its citizens, stands in a position peculiar and distinct from that of other nations. Our country could do

very well without any foreign supplies, and if it devoted all its energies to the establishment of domestic markets throughout the immense extent of its own domains, it might find large enough and profitable enough sale for its products.

The densely populated countries, England and Germany, and the comparatively small nations of Portugal, Denmark, Switzerland, Belgium, and Greece, limited as they are in natural resources, need foreign trade to supply them with the necessaries of life, and could only with difficulty get on without such trade. Again, their territories are so circumscribed that they would not find markets enough for their surplus products. Russia, although greater in extent of territory than the United States, has not the same class of inhabitants as the United States, and is more or less dependent on outside help.

The domestic trade of the United States could be immensely increased. Even as it is, the domestic trade of this country is so extensive that foreign trade appears small in comparison. It is the opinion of many that too much emphasis is put upon our foreign trade, and too much mental labor and discussion are accorded it, when our domestic trade deserves more attention because of its immense expansion. Yet to others it is an indication of the extent of production in the United States, that the country, large as it is, cannot supply markets enough for its produce, but must seek more markets abroad.

To arrive at any definite knowledge of the extent of this domestic trade is not easy, since it is so difficult to know the facts. Whereas foreign trade transactions are recorded in the custom houses, domestic trade transactions are carried on in great measure without public record. Estimates, however, have been made, and the following table will give a fair idea of the extent of the domestic trade of the United States: —

1850	$2,000,000,000	1880	$ 7,750,000,000
1860	3,500,000,000	1890	12,000,000,000
1870	6,250,000,000	1902	20,000,000,000

Consular Service. — To look after its commercial interests in foreign countries, each nation has its Consular Service. The

consuls of one country are stationed in all the important cities of every other country, and it is their duty to watch over the interests of the home country and to send home reports of trade conditions abroad.

The United States has about 1100 consular representatives of different grades in the various trade centers of the world. They are appointed by the President.

The consular service of the United States has been of help to home manufactures through the reports sent in to and published by the government. Manufacturers are informed about the foreign markets and the best methods of shipping their goods to those markets. Various means are suggested for increasing the foreign trade and of coping successfully with the competition of manufacturers of other countries.

Before 1906, the consular service of the United States was at a low ebb of efficiency, due to the facts that the consuls were poorly paid, that favoritism and the " spoils system " had much to do with the appointments, that very little supervision was exercised over the consular officers by the government.

In 1906, a law was passed which classified the consulships according to their importance, substituted salaries for fees, confined consuls of a certain grade to the duties of their office, and instituted a system of supervision and inspection of the work performed. At the same time, the President (Roosevelt) issued an executive order subjecting all candidates for the consular service to a rigid examination, and providing that appointments should be made to the lower grades, and that the persons so appointed should be promoted to vacancies occurring in the higher grades, such promotion to be dependent on the efficiency shown.

These measures promise well for the improvement of the service, and have already had a beneficial effect by attracting a better class of applicants for consular positions. There can be no doubt that our foreign trade will be helped by the greater efficiency of the consular service.

Foreign Payments. — The means of receiving payment for

goods shipped abroad is by bills of exchange. Money is sent to pay the balance. That the system of exchange is necessary may be gathered from the fact that no country has sufficient money to pay for its imports and at the same time retain money enough at home to carry on its own domestic trade.

In the following table, showing the value of the imports and the stock of gold actually possessed by the countries, it will be seen that England, France, and Germany would not have sufficient money to pay for their imports, if actual money had to be paid out for them. Hence the evident advantage of exchange.

Year	Country	Imports	Stock of Gold
1912	United States	$1,653,000,000	$1,799,600,000
1911	United Kingdom	3,309,000,000	710,800,000
1911	France	1,556,000,000	1,200,000,000
1910	Germany	2,126,000,000	185,000,000

(Stat. Abstr., 1912.)

II. Balance of Trade and Balance of Accounts

Balance of Trade. — When the exports of a country exceed its imports, the balance of trade is said to be favorable to that country. It was the custom of the believers in the old mercantile system, and it is the custom of not a few to-day, to estimate the prosperity of a country by the balance of trade. They would have it that if the exports exceed the imports, the country is prosperous; if the reverse holds, the country is in danger, since it must export gold to pay its trade balances.

Since 1877, the balance of trade has been in favor of the United States, with the exception of three years, 1888, 1889, and 1893. If we look at some other countries, we find the balance of trade to be against them. Thus, in 1911, we find the following facts for England, France, and Germany: —

	Imports	Exports	Excess of Imports
United Kingdom . . .	$3,309,000,000	$2,209 000,000	$1,100,000,000
France	1,556,000,000	1,172,000,000	384,000,000
Germany	2,309,000,000	1,928,000,000	381,000,000

From the above table one would expect that these countries were far from prosperous, and that they would have to send out much gold to pay for the balances of their foreign trade. But, in summing up the standing of a country, there are other items which must be taken into account. We must judge of the financial state of a country by the Balance of Accounts and not merely by the Balance of Trade.

Items entering into the Balance of Accounts. — In the balance of accounts there are five principal items, besides exports and imports, which raise the credit side of a country's accounts: —

(1) *Investment of Capital in Foreign Countries.* — Foreign investments are made in United States bonds, state, county, and municipal bonds, railroad stocks and bonds, industrial, bank, and mining securities, real estate, life insurance. It was estimated that before the war of 1914 six billions of foreign capital were invested in the United States. The interest on this vast sum was paid to foreigners.

(2) *Cost of Transportation* paid to foreign shipowners — freight and insurance. Prior to the war of 1914, England's claims against other nations on account of transportation amounted to over $400,000,000 annually, and the United States was paying over $200,000,000 a year for transportation and insurance. In 1912, American vessels were carrying only 11% of our imports and domestic exports in our foreign trade.

(3) *The Sums spent by Travelers in Foreign Countries.* — American tourists' expenditures in foreign lands for many years prior to 1914 averaged $18,000,000 annually.

(4) *Bankers' Commissions.* — During the prewar period London was the bank of the world. The commercial paper and the

bills of exchange of all nations were handled by the banks of London, and the yearly commissions of London bankers for this feature of banking amounted to immense sums.

(5) *Immigrants' Remittances.* — From 1896 to 1914, the sums thus sent abroad by immigrants amounted to over $158,000,000 annually.

From these various items, which constitute the invisible indebtedness of a country, it follows that a country, the exports of which far exceed its imports, may still be a debtor country. Upon the balancing of the invisible items, it may be found that the excess of exports does not pay for the demands of the several items mentioned above. As a matter of fact, the United States has in the past thirty years been obliged to export gold to balance accounts, although the exports exceeded the imports.

Since the beginning of the war of 1914, conditions have changed. Our exports have increased immensely over all preceding years, and at the same time the invisible items that kept the United States a debtor country have been considerably reduced or totally eliminated.

The investments of foreign countries have passed into the hands of Americans to the extent of billions of dollars.

The cost of transportation has been curtailed through the increase during the war of the merchant marine of the United States and of the transportation of foreign trade goods in American vessels. The tonnage of the United States increased from 7,714,183 tons, in 1912, to 16,324,024 tons, in 1920. The shipping engaged in foreign trade, in the latter year, amounted to 9,924,694 tons. Whereas in 1912 only 11% of our foreign commerce, exports and imports, was carried by American vessels, in 1920, 43% of our foreign trade was conveyed in American ships. The merchant marine of the United States to-day ranks second among all the nations of the world.

Tourists' trips and the remittances of immigrants abroad ceased during the four years of the war, and that drain on American money was stopped for a considerable period.

The unsettled condition of foreign exchange and of foreign

currencies, which ceased to be based on the gold standard, have hampered the efficiency of London banks, so that they no longer draw the immense commissions as in former times.

All these changed conditions together with the immense debts contracted by foreign countries in the United States have conduced to make the United States, for the time being at least, a creditor nation.

Correlation between Imports and Exports. — Another fact that must be taken into account in this connection is that exports and imports influence each other. It is given as a law that exportation provokes and determines importation, and the converse is also true, that importation provokes and determines exportation.

If we take, for example, two countries, A and B, and suppose that the exports of A to B exceed the imports and other items of the balance of accounts, the final excess must be paid by B to A in gold. The sending out of gold from B will reduce the amount of money in B, and, as a consequence, there will be a stringency in money and a fall of prices in B.

The fall of prices in B will prevent A from sending its exports to B to the same extent as before; A will limit its exports to B, and will seek other countries, C, D, and E, where the prices will not be so low.

On the other hand, the inflow of money to A will cause a greater amount of money in A, and prices in A will rise. B will increase its exports to A, because of the good market it finds there. Thus, the exports of A and B will seek an equilibrium. This example illustrates an important principle in international trade.

The example may be summarized as follows: —

	A	B
1.	Exports greater than Imports.	Imports greater than Exports.
2.		Gold moves from B to A.
3.		Amount of money less.
		Prices lower.
		Poor market.

4. Exports to B diminish. Imports from A diminish.
In the meantime, because of the flow of money into A,
5. Amount of money greater.
Prices higher. Good market.
6. Imports from B increase. Exports to A increase.
7. Exports and Imports equal. Imports and Exports equal.

III. Customs Duties

Definitions. — International trade may be affected by customs duties.

These include Export duties and Import duties.

Export Duties are duties imposed on products of the home country, whether in the raw state or as finished goods, which are shipped abroad to foreign countries. Duties on exports are very rarely imposed.

Import Duties are duties imposed on products of other countries entering the home country. Import duties are frequently resorted to.

Import duties are of two kinds, Specific and *Ad valorem.* A specific duty is so much on the bulk of the product, *e.g.*, 25 cents per pound, 30 cents per gallon. An *ad valorem* duty is a tax of a certain per cent of the value of the imported product. (For a discussion of the relative merits of specific and *ad valorem* duties, see "Customs Tariffs," Senate Document No. 547, pp. 52, 92, et al.)

Tariff. — The list of import duties on various products is called a Tariff. The tariff of the United States is divided into schedules, as follows: —

A. Chemicals, Oils, and Paints.
B. Earths, Earthenware, and Glassware.
C. Metals and Manufactures of Metals.
D. Wood and Manufactures of Wood.
E. Sugar, Molasses, and Manufactures of Sugar and Molasses.
F. Tobacco and Manufactures of Tobacco.
G. Agricultural Products and Provisions.
H. Spirits, Wines, and other Beverages.
I. Cotton Manufactures.

J. Flax, Hemp, and Jute, and Manufactures of.
K. Wool and Manufactures of Wool.
L. Silk and Silk Goods.
M. Papers and Books.
N. Sundries.

A tariff law often includes also a Free List, containing the names of all goods on which no duty is charged.

The tariff may be a Revenue tariff or a Protective tariff.

A revenue tariff fixes import duties with the object merely of securing sufficient revenue for the sustaining of the machinery of the government. In this case, the taxes are high enough to secure a revenue, but are not prohibitive of importation, and those imported goods are usually taxed which do not come into competition with home industries. Thus, England taxes tea and gains thereby a revenue of about $17,000,000 per year.

A protective tariff has for its object the protection of certain home industries, which for various reasons could not otherwise compete with the same industries carried on by foreign nations. The free importation of certain foreign articles may threaten the existence of home industries. Duties imposed on the foreign articles restrict their importation, and the home industries are encouraged to develop. The cost of the goods to the consumer is increased, but it is claimed that the extra cost paid by importers and consumers is counterbalanced by the public good attained in the development of home industries.

Protectionist Policy of the United States. — The United States has been for many years committed to the principle and practice of protection. The adoption of protection in the United States was brought about by force of circumstances, as will be seen in the historical sketch that follows (pp. 248–252). It was not the result of any scientific investigation into the relative merits of free trade and protection. As Ely (*Outlines of Economics*, 1908, p. 311) says: "The American tariff is a historical growth, and bad as it may be in many respects, it has taken deep root. During the last century it has become part of our life, and cannot be suddenly eradicated with impunity."

That protection, at least in a modified form, will continue to be the policy of the country for many years to come, seems to be the opinion as well as the hope of the more conservative authorities. The protective policy of the past has created a condition in the industrial and commercial life of the country that could not endure if there should be a sudden change of policy. Immediate adoption of free trade would be tantamount to opening the floodgates of ruin and anarchy. Numerous industries that owe their origin to protection, or that can exist only through the help received from the artificial prices created by the tariff, would be destroyed. An immense amount of capital invested in such industries would be lost, the laboring class would suffer by the closing down of the mills, and social revolution would be imminent.

At present the popular opinion appears to favor at least a modified protection. The political party that formerly stood for free trade has considerably modified its views within recent times. The South that held so long to the free trade principle now demands a measure of protection. The agitation in England, since 1846 a free trade country, looking to the adoption of protection, will undoubtedly have weighty influence in confirming protectionists in their views and in modifying the force of free trade arguments.

Protection without doubt has its advantages. But the method of protection as pursued by the country at present has come to be considered the main cause of the evils which society endures. The high cost of living, the huge corporations and trusts which have arisen under protection, the concentration of money and the power attendant on great wealth, the large dividends which industries can pay to stockholders, the vast profits that accrue to corporations, while the army of laborers who contribute to these profits by their labor and their skill receive but the modicum of wages — these are some of the evils of the day that are laid at the door of protection. Moreover, while protection has added to the number of industries in the country, it has at the same time introduced into

the industrial world a host of industries and establishments which are able to survive and make a bare living wholly because of the high protective tariff. These industries determine in most cases the price of labor, the wages of the workingman. Such wages must necessarily be low, because of the small profits the tariff-supported industries can make. If protection were withdrawn, these industries would have to go out of existence. Nor would it be an unmixed evil if industries that are unable to pay a living wage to their employees were driven out of the field of labor competition.

The evils following upon the present methods of protection are apparent, but the remedy, in the opinion of prudent and conservative thinkers, does not lie in the immediate and sudden withdrawal of protection. A system that appeals to them is a gradual reduction of tariff duties, extending over a period of years, allowing existing industries to accommodate themselves to the change, and enabling those great factors of production, capital and labor, to adapt themselves to new conditions.

Such indeed was the popular demand expressed in the presidential election year of 1908, and still more insistently declared in the year 1912. In answer to the popular clamor in 1908, some effort was made through the Payne tariff to remedy the acknowledged evils of the high protective duties. As subsequent events demonstrated, the effort failed of its purpose.

The duties were substantially lowered by the Underwood tariff, which became law Oct. 3, 1913. If it had been expected that the new tariff would at once inaugurate a reign of prosperity in the land, the expectation was not fulfilled. Many important industries were seriously affected by the reduction of duties. A degree of unrest and uncertainty prevailed throughout the country. Defenders of the law, however, claimed to see a gradual adjustment of industries to the new conditions, when the European war (Aug. 1914) upset the whole commercial life of the world.

One of the salient facts that must strike even the superficial student of tariff-making in this country is the immense diffi-

culty to be found in adopting a tariff that will be satisfactory to all industries and to all sections of so vast a country as the United States. Many of the great industries of the country are so interwoven and so interdependent that the raising or lowering of duties on the product of one will produce an effect on a whole chain of connected industries. Because of this fact and others as important, any real reform in tariff matters must be the result of long and deliberate study and investigation.

A step in the right direction has been taken by the creation, on Sept. 8, 1916, of a permanent Tariff Commission. It is composed of six members appointed by the President, not more than three of whom shall be adherents of the same political party. The duty of the Commission is in general "to investigate the operation of customs laws, including their relation to the federal revenues, their effect upon the industries and labor of the country, and to submit reports of its investigations" to Congress. (Act Sept. 8, 1916.)

The Commission can do much to eliminate the evils of the present system, and to establish the tariff on a scientific basis.

Methods to replace Protection. — Other methods have been suggested to take the place of tariff protection. They are: —

(1) *Bounties to Producers.* — These would have the following advantages: They would not provoke international conflicts. They would not hinder production, because they would not increase the price of raw material. They would allow no misconception with regard to them. They would be an admission of our weakness in certain lines of production.

(2) *Freedom from Taxes* for infant and weak industries, as in the case of educational establishments.

(3) *No Help at all to Infant Industries.* — Left to themselves, it is claimed, they will in time establish themselves on a paying basis.

Contractual System. — A system that has come into vogue recently is the Contractual System. Commercial treaties are made between nations. These treaties have the following advantages: —

1. They guarantee stability of tariffs for a definite period, usually ten years.

2. They admit differentiation of rates. There is a maximum and a minimum rate. The " most favored nation " clause allows the minimum rates to the nation having that clause.

3. They lead to a more liberal régime and to the abolition or lowering of barriers between nations.

Tariffs are now constructed with a view of obtaining the best possible treatment from other countries, and are made to contain certain more favorable conditions and certain broad concessions, which may be applied to nations which show a corresponding kindly disposition. A certain amount of latitude is granted the President, so that he may enforce the strict letter of the law against foreign countries or grant them concessions, as circumstances may determine.

QUESTIONS

1. What is international trade? What are some of its causes? Its effects? Its advantages?
2. Why has the consular service been instituted?
3. Why are bills of exchange necessary?
4. How does the domestic trade of the United States compare with its foreign trade?
5. Is an unfavorable balance of trade an indication of the lack of prosperity of a country?
6. What items enter into the balance of accounts of a nation?
7. Explain by example the correlation between the imports and the exports of a country.
8. What are export duties? Import duties? Specific duties? *Ad valorem* duties?
9. What is a tariff? How is the list made up?
10. What is a revenue tariff? A protective tariff? What is the policy of the United States in regard to the tariff?
11. What suggestions have been made to render tariff-making more effective? What have been the defects alleged to exist in the recent tariff-making?
12. What difficulty attends all tariff-making in the United States? What is the reason for the creation of a permanent Tariff Commission?
13. What methods are suggested to replace protection?
14. What is the contractual system?

CHAPTER XIV

PROTECTION AND FREE TRADE

I. Historical Sketch

Historical Sketch of Protection. — From the close of the Middle Ages, all countries were for protection. Agitation set in during the latter part of the eighteenth century.

1774. France tried free trade.

1776. Adam Smith's *Wealth of Nations* proclaimed free trade, and had immense influence in forming public opinion throughout the world.

1789. An act was passed by the newly formed Congress of the United States government, for the levying of duties upon foreign goods imported into the country. Its purpose was mainly for the support of the government.

1806. During a war between France and Great Britain, the British government issued an "Order in Council," declaring the coast of Europe from Brest to the Elbe in blockade. In the same year, Napoleon, by his "Berlin Decree," declared the British Isles under blockade.

1807. Great Britain issued a new "Order in Council," forbidding American and other neutrals to carry any products to France, except on the two conditions, that vessels carrying such products undergo search by British authorities for contraband goods, and that they enter a British port and pay duties on the cargoes. In the same year, Napoleon issued his "Milan Decree," commanding the seizure of any vessel which should conform to the ruling of the last "Order."

1807. Subsequent to the issue of the 1807 "Order in Council," Congress, at the suggestion of President Jefferson (1801–

1809), passed the Embargo Act, which closed our ports to all trade with foreign nations.

1808–1809. This act was further strengthened by additional legislation. Our exports fell in a single year from $49,000,000 to $9,000,000.

1809. To prevent smuggling, the " Force Act " was passed. It prohibited the loading of any vessel except by permit, and allowed the seizure of any produce or goods on their way to the seacoast, unless the owner gave bonds that they should not be sent out of the country. The act was enforced by the use of United States land and naval forces and state militia.

The Embargo Act had a great economic effect on the country. Labor and capital were forced into home manufactures. Cotton mills, shoe, hat, and other factories were started, and many important industries were opened up.

1809. Towards the end of the year, the Embargo Act was repealed and replaced by the Non-intercourse Act, which opened our ports to all nations except France and England.

1812–1815. The war with England caused a withdrawal of foreign competition. As a result, our home industries, especially our textile manufactures, grew rapidly.

1815. The war ended, and imports began again. The newly started industries met the competition of foreign producers, and, to save them, protection was found necessary.

1816. By the tariff of 1816, the customs duties on imports were raised, especially those on cottons and woolens. The tariff then became protective, and has with slight exceptions remained so down to this day.

1824. Henry Clay advocated protection for protection's sake, and caused to be passed in Congress a new tariff, which fixed the average scale of duties at thirty-three and one third per cent.

1828. A new tariff bill was passed, increasing the previous average rate from thirty-three and one third per cent to forty-five per cent. This bill was violently opposed by the South.

1831–1832. Additional duties were laid on manufactured goods.

1833. A compromise tariff became law. It provided for a gradual reduction of duties during the following ten years. The tariff was brought about by the agitation in the South. There the cotton producers felt the restriction put upon their produce, because of the lessening of demand of foreign cotton mills, which was the result of the high imposts. The duties gradually reached a twenty per cent level. (Cf. E. L. Bogart, *The Economic History of the United States*, p. 153.) The result was the suspension of many factories and a general depression in trade in 1837–1842.

1840. A protectionist president (Harrison) was elected.

1845. The compromise tariff was repealed, and a new tariff act passed which raised the duties.

1846. England adopted free trade.

1846. The Walker tariff, intended chiefly for revenue and not protection, became law. The rate was about twenty-four per cent.

1857. The duties were still further lowered.

1861. The Morrill tariff act restored duties to the status of 1845 and increased the duties on iron and wool.

The Southern Confederacy adopted free trade in its constitution.

1861–1865. Civil War.

1862–1864. "War tariffs" taxed every import. Almost every domestic product was taxed, and a corresponding compensatory duty imposed on imports. The average tariff rate was 40.29 per cent.

1865. Taxes were reduced.

1867. The Senate voted to repeal the tariff. The House opposed.

1870–1872. Tariff rates were reduced and the free list greatly enlarged.

1883. The tariff was revised, some taxes being lowered and some raised.

1888. The Mills bill proposed placing wool on the free list. The bill failed of enactment into law.

1890. The McKinley tariff was adopted. The duties averaged 48.2 per cent, and power was given the President to impose duties on free articles, when countries entering these free articles levied unreasonable duties on our goods.

1894. The Wilson-Gorman tariff was adopted. It made the average rate 37 per cent. Wool, copper, and lumber were on the free list.

1897. The Dingley tariff was enacted. Copper was made free, the steel duty lowered, wool and lumber were taxed. The duties were in general made higher.

1908. More or less agitation had been going on during the past decade on the subject of the tariff. Special interests in special parts of the country had sought a reduction of the existing tariff rates on certain commodities, and this agitation had become general throughout the country during the years immediately preceding, so that the government was led to institute an investigation into the matter.

A Congressional Commission had before it, during the year 1908, manufacturers in various lines, and sought out facts that might lead to a change of tariff rates. The tariff question became a political issue in the presidential election which took place in this year, and both parties gave pledges of a revision of the tariff as the first step of the new administration. The Republican party won the election, and W. H. Taft became President-elect.

1909. President Taft assumed office March 4, and faithful to the pledge he had given prior to his election summoned an extra session of Congress to meet March 15, for the purpose of revising the tariff.

The extra session was held at the time appointed, and after over four months' discussion in Congress, the Payne tariff became a law, August 5.

Although disputed by some, the Payne tariff was generally admitted to be on the whole a slight advance of rates above

those of the Dingley tariff. It reduced former rates on iron ore, lumber, and leather products, placed hides and works of art on the free list, advanced rates on cotton goods. Notwithstanding a few such changes, the new tariff practically left matters where they were before, bringing very little if any amelioration of the condition of the great mass of the people, the consumers.

The new tariff contained provisions for a maximum and a minimum rate. The maximum rate was an increase of 25 per cent on all duties, and was to apply to all countries that discriminated against the products of this country.[1]

1912. During the preceding four years the high cost of living brought about a condition of popular unrest and dissatisfaction. The high prices were generally attributed to the tariff. Hence, revision of the tariff became the main issue in the presidential election campaign of this year. The Democratic party pledged itself to a reduction of the tariff, and a democratic President was elected. Both Houses of Congress were Democratic.

1913. On April 7, an extra session of Congress was called by President Wilson to make changes in the tariff. The Underwood bill was taken up in Congress, and after long deliberation became a law on Oct. 3, 1913. The new tariff reduced the average tariff rate from 36.86 per cent to 26.67 per cent. It put on the free list all meats, raw wool, steel rails, and wood pulp. It reduced the tax on sugar. It lowered duties on articles of clothing, on machinery, and on live stock. To make up for the deficiency in the government revenue resulting from the reduction of the tariff, a federal income tax was imposed.

1916. On Sept. 8, a Tariff Commission composed of six members appointed by the President was created to study the tariff problems and report thereon to Congress.

1921. On May 27, the Fordney Emergency tariff was approved. It increased duties, contained anti-dumping provisions, and restricted imports of dyes and chemicals.

[1] The same law provided for a corporation tax: A tax of 1 per cent was imposed on the net earnings of corporations over and above $5000.

II. Effects and Principles of Protection

Under this heading protection will be discussed in its various phases. It is believed that the discussion will suggest original thought and lead to a better understanding of the subject.

1. **Protection invites Capital to take up new Industries** by making them profitable.

When industries are open to competition, it is certain that, owing to a lower rate of wages, greater mechanical skill on the part of laborers long engaged in the arts, a greater amount of natural facilities, cheaper transportation, and various other reasons, foreign producers of certain commodities may be able to undersell our home producers and keep them from the markets.

But let a duty be put on the foreign product when it is imported into our country, and the effect will be that the cost of production of the imported article will be greater, the impost entering into the cost of production, and consequently the price of the foreign article will be raised. The home producers can now undersell the foreign producers and secure a market for the home product. To illustrate: —

Cost of production of an article before protection —

Foreign	$ .90	
Home	1.20.	Price = $1.00.

Evidently the home producer will not produce.

Let a duty of $.50 on each imported article be imposed, then,

Cost of production of the article after protection —

Foreign	$1.40	
Home	1.20.	Price = $1.30.

Evidently the foreign producer will be driven from the market. In each case, the price is controlled and may be fixed by the producer whose cost of production is lowest.

In a case similar to the one above, home capitalists will invest in the protected industry, because it has become profitable to do so. And that they have done so may be seen by a review of the history of commerce in the United States. The moment an industry otherwise unprofitable became a protected industry, large sums of capital were invested in it.

2. **Does Protection increase the Labor and Capital in a Country?** — This is a disputed question. The proposition that protection does *not* add to the total amount of labor and capital in a country rests on the supposition that in every country capital will be invested in those industries for which the country offers special facilities, and that those industries are so numerous and so profitable that they will employ all the capital and labor of the country. In that case, protection, if introduced, would divert labor and capital from old industries or from other industries which would not need protection. The total amount of capital invested and labor employed would still remain the same, but they would be engaged in other industries.

The proposition, however, will not stand when the old and unprotected industries, in which capital would naturally be invested under free trade, do not offer profit enough to induce capital and labor to engage in them. This condition might be brought about by competition, which might reduce profits to the lowest possible limit, or by overcrowding of the labor market. In such a case, capital would not be invested in such industries, but would be allowed to remain in safe but low-interest-paying securities, or it would go outside the country in search of more profitable investment.

Nor will the statement be absolutely true if the protective duties cause foreign capital to be invested within the limits of the home country in the protected industries. In either of these cases, it must be admitted that protection does add to the total amount of capital and labor in the country.

3. **Protection establishes less Productive Industries** in place of more productive industries, and causes thereby an economic loss to the country.

This statement may be illustrated as follows: $100,000 is invested in an industry which is unprotected and which can be carried on profitably without protection. We will suppose the profit to amount to $2000 a month, made on 1000 articles produced. The relation between capital and profit and product may be expressed thus: —

Capital	$100,000
Profit	$2,000
Product (articles)	1,000

Let this capital be taken out of this industry and be invested in a protected industry. A protected industry is presumably an industry which on account of various disadvantages will not be sufficiently profitable if left to itself, and needs the aid afforded by the protective duties. Suppose the protected industry in this case is one in which $100,000 capital would produce 800 articles a month at a profit of $1200 without protection, and that a tariff of $2 per article is imposed for protection. The relation of the above $100,000 capital to profit and product might then be expressed by the figures:—

Capital	$100,000
Profit	$2,800
Product (articles)	800

But of the profit in this case $1600 is due to the tariff and is paid by the consumers in the country in addition to what they would have to pay for articles imported free of duty. The figures 800 articles at $1200 profit represent the real relative inferiority of the protected industry, as compared with the figures 1000 articles at $2000 profit in the unprotected industry employing the same amount of capital.

If 1000 articles are to be produced in the protected industry, more capital must be invested. Thus the reduced productivity of capital is apparent. The amount of the product, relative to the capital employed, will be less than if the same amount of capital were employed in a self-supporting industry.

This condition constitutes an economic loss to the country, and the loss continues while the industries remain dependent on protective duties.

It is claimed, however, that the economies developed in an established industry will ultimately make it self-supporting, and that there will come a time in most of the protected industries

when they will not need the help of protection, but may prosper unaided.

Indeed, it is held by many that these industries, if left unprotected and abandoned to their own resources, would in time have risen of themselves and have forced their way to the top, in spite of the opposition presented by foreign competition. They would be undertaken by venturesome capitalists who would persevere in spite of small profits. Gradually, the cost of production would be lowered and the industry reach a self-supporting basis. When such a stage is reached, the industry ceases to be an economic loss to the country.

4. **Protection should be Temporary.** — Protection hastens the establishment of a new industry, which in time becomes self-supporting, after which protection should cease and the price of the product should decrease.

It may happen that in the beginning some industries will meet special disadvantages which would render them unprofitable because unable to compete with the same industries long established and carried to a high degree of efficiency by foreign producers.

Here protection will undoubtedly benefit the infant industries, and J. S. Mill, although an upholder of free trade, makes an exception in this case in favor of protection. He says: "The expense of production being always great at first, it may happen that the home production, though really the most advantageous, may not become so until after a certain duration of pecuniary loss, which it is not to be expected that private speculators should incur in order that their successors may be benefited by their ruin. I have, therefore, conceded that in a new country a temporary protecting duty may sometimes be economically defensible; on condition, however, that it be strictly limited in point of time, and provisions be made that during the latter part of its existence it be on a gradually decreasing scale." (In Ely, *Problems of To-day*, p. 61.)

After a time, through inventions in machinery, the increasing efficiency of the workmen, the advance of connected industries,

and competition between domestic enterprises, the disadvantages under which the infant industry labored may be overcome, and then the industry will become profitable in itself.

When this has come about, there is no further need of protection. The industry is able to withstand the competition of foreign producers, and the tariff should be withdrawn so as to force a reduction of prices. Even without a change in the tariff, the producer should be content with a reasonable profit, such as would be realized if the price of the product were fixed about the same as the price received by the foreign producer before the tariff was imposed; and competition between different producers ought to force the price down to that point.

Unfortunately for the consumer, this is not always done. Long after the industry has become independent of all tariff aid, and has reduced the cost of production so as to be able successfully to compete with a foreign industry, the artificially made tariff prices are kept up. Combinations of capital are made by which the higher prices are maintained. The result is that the profits of the capitalists become enormous and the consumer is made to bear the burden. Protection in such cases becomes class legislation, favoring the few at the expense of the many.

Another result from such a condition of things is that there are sometimes two prices for a product, a high home price, which is determined by the tariff, and a lower foreign price for the same product sold abroad. Thus, if the cost of production, in the beginning 70 cents, has been reduced to 40 cents through the gradual growth of the industry, it is clear that the producer may with profit sell his product in foreign markets for 60 cents or 70 cents, while the home tariff-fixed price remains at 80 cents.

Although protection should be withdrawn or at least gradually decreased when the industry has become self-supporting, there are obstacles in the way of making either change. Our own industrial history shows that many protected industries, though they have long since passed out of the stage of infancy, have

constantly been clamoring for still greater protection, and prices have risen instead of gradually falling.

This feature of the case may be thus explained. A protected manufacturing industry may be carried on by several classes of producers, A, B, C, D, E, F, etc. Class A enjoys extraordinary facilities and could profitably carry on the business without any aid from protective duties. Class B, having fewer natural advantages, needs some slight help. Class C, still more disadvantageously placed, needs yet greater help. And so on through the series of classes until we meet the lowest class, which is just able to make a slight profit with all the assistance afforded by protection.

Protection is absolutely needed by this lowest class, and proportionately less by each class as we ascend the scale, and every increase of protection will be gladly accepted by the classes lowest down in the series. If protection were reduced, the lowest would have to retire from business. Hence the constant striving after greater protection by the inefficient classes, which have engaged in the industry and can continue in the industry only because of the high prices established by protection.

5. **The Burden of Raised Prices under Protection falls on the Consumer.** — If, under foreign competition, the price of an imported article is 60 cents, and a duty of 50 cents is imposed, the price of the article may rise from 60 cents to $1.10. The added cost of production imposed on the foreign producer will enable home producers to compete with foreign producers, and the price fixed by the home producers will be as close as possible to the foreign tariff-made price, with the double view of gaining the greatest amount of profit and of securing the largest market for their own product. In the case quoted, the price might be $1.00 or $1.05 or $1.10.

Before the tariff was imposed, the consumer could obtain the article from the foreign producers for 60 cents; after the tariff is imposed, he must pay $1.00 or $1.05 or $1.10 to the home producers (or to the foreign producers) for the same article.

If 20,000,000 articles were consumed when supplied by foreign

producers at the price 60 cents, it may be that, after the imposing of the tariff, the number of foreign products consumed will fall to 5,000,000, and home products will supply the deficiency of 15,000,000.

For the 20,000,000 articles at the price 60 cents, the consumers paid $12,000,000. Under the tariff, they must pay for the 5,000,000 foreign articles, at the rate of $1.10 each, say $5,500,000, part of which will go to the government as customs duties, and for the 15,000,000 homemade articles, at the rate of $1.05 each, say, $15,750,000, or a total under the tariff of $21,250,000, — an increase of $9,250,000 over the price paid under free trade.

Free Trade		Protection	
Foreign product	= 20,000,000	Foreign product	= 5,000,000
Price	= $.60	Home product	= 15,000,000
		Foreign price	= $1.10
		Home price	= $1.05
Sum paid by Consumers			
For foreign product	= $12,000,000	For foreign product	= $5,500,000
		For home product	= $15,750,000
		Total	$21,250,000
			12,000,000
		Increase	$9,250,000

The consumer may suffer in still another way. In order to be able to sell his product at a slightly lower price, the foreign producer may reduce the cost of production, or he may adulterate his goods. This latter means may frequently be resorted to, with the result that the consumer, though paying a higher price, will receive an article of inferior quality.

In the former case, the reduction of cost of production may be brought about by the employment of cheap and inefficient labor, with a consequent deterioration of the article produced.

It must be said that when, in the illustration given above, the price of the article is raised to $1.05 by the tariff, a great amount of capital may be invested in the industry, and production may receive so great an impetus that the supply of articles will greatly increase. The supply thus increasing, the

price of the article may be forced down by competition of different producers. In all probability, however, it will not fall to the level of the free trade price, 60 cents.

Again, the impetus given to production may end in overproduction and a congestion of the markets, with a consequent injury to both labor and capital. Says one writer: "At the present time [1905] this very phenomenon is taking place in France with regard to wine growing. The high duty put on foreign wines, and the subsequent rise in prices, led to so great a production of wine that it exceeded the demand and resulted in the failure of many wine growers to dispose of their goods. The same result, although on a smaller scale, has taken place in French wheat production." (Gide, *Principles of Political Economy*, p. 341.)

6. **Protection should be Limited.** — If protection were limited to a few industries, it could no doubt help them and cause them to grow stronger and ultimately to reach a stage where they would be self-supporting.

But if protection is given to many industries, it will have the effect of raising the prices of all the products of these industries, and as the products of some industries will be material for other industries, the protection to the latter will be largely offset, and the period at which they might have become independent and self-supporting will be indefinitely delayed.

Let *a*-10, *b*-20, *c*-30, *d*-40, *e*-50, be materials produced by five unprotected industries, *A*, *B*, *C*, *D*, *E*, and used by an unprotected industry *N*, with the figures representing the prices, in cents, at which the materials may be obtained under free trade, when all the markets are open and materials may be obtained at the cheapest rates. The price of the articles produced by industry *N* may be 60 cents.

Now, if industry *N* is in a struggling condition, it may well be benefited by an import duty, which will restrict foreign competition in the article produced by *N*, and cause the price of that article to rise to $1.00. There will be a gain for industry *N* of 40 cents on each article, and while the materials used by it re-

main as they were at the price figures 10, 20, 30, 40, 50 cents, industry *N* will be put on a fair way to become more efficient, and may in a comparatively short time reach a stage of independence, when the duty of 40 cents may be removed with no detriment to the industry and with evident benefit to the consumer of the article produced by the industry.

But if, while the help of a duty of 40 cents on each article is given to industry *N*, and the price of the article is raised from 60 cents to $1.00, protection is granted also to the industries *A*, *B*, *C*, *D*, *E*, the result may be that the prices of the materials produced by these industries will rise from the figures 10, 20, 30, 40, and 50 cents, to, let us say, 20, 40, 60, 80, and 90 cents.

It will be evident that industry *N* may now be no better off even with the price of its product raised by duty to $1.00, than it was before with the price at 60 cents and with the materials of industries *A*, *B*, *C*, *D*, *E*, rated at the prices 10, 20, 30, 40, 50 cents.

Unprotected Industries	*A*, *B*, *C*, *D*, *E*.
Materials produced by them, and used by *N*	*a*, *b*, *c*, *d*, *e*.
Prices of these materials, in cents	10, 20, 30, 40, 50.
If price of *N*'s article is $.60	Difficulty.
If price of *N*'s article is $1.00	Success.

After protection has been extended to	*A*, *B*, *C*, *D*, *E*.
Materials as above	*a*, *b*, *c*, *d*, *e*.
Prices of materials, raised by tariff, in cents	20, 40, 60, 80, 90.
If price of *N*'s article is $1.00	Difficulty.
If price of *N*'s article is $1.40	Success.

If adequate protection is to be extended to industry *N*, a new duty must be imposed on the foreign competing product, so that the price of the product of industry *N* may be raised still further.

7. **Protection reduces Foreign Trade.** — Protection has the effect of reducing the imports and the exports of a country, and it cannot bring about a permanent increase of money in a country.

When, for instance, the price of an article is such that foreign producers can sell in our markets with profit, foreign producers of that article will send to us a great amount of their product.

Let a tariff duty of 40 per cent or 50 per cent be imposed, and the foreign producers will be forced to restrict the amount sent to us, and will seek other markets, where the price is more inviting than ours. Should this extend to a great many articles, it will be clear that there will be a great decrease in our imports.

Our exports will surpass our imports. The excess of our exports will be paid for in money, and gradually the amount of money in the country will increase. A rise in prices will follow.

This rise in prices will make our markets less advantageous for foreigners to buy in. The demand for our goods will decrease. Our exports will decrease. Indeed, it is an axiom that a country cannot export unless it will import.

Owing to the excess of our exports over our imports, which protection will cause to exist for a time, there will be a flow of money into our country. This will not be permanent, for the reason mentioned above, viz., the temporary inflow of money will cause prices to rise and will bring about a reduction of our exports.

8. **Protection causes International Animosities.** — The adoption of a high protective tariff by one nation antagonizes the commercial interests of other nations, and will lead to retaliatory high tariffs against the exports of the protectionist nation. The export trade of such a nation may be materially affected and even wholly destroyed by such counter tariffs. New markets must be sought with much risk and loss to exporters. And so animosities are aroused between nations which may easily pave the way for actual war.

An illustration of this may be found in an agitation that once arose in the relations between Germany and the United States. Our tariff rates on foodstuffs aroused the animosity of the German agrarian party, and they sought help from the government in the shape of a high import duty on all American goods. The German government in February, 1905, entered into commercial treaties with Russia, Austria, Switzerland, Roumania, Italy, Belgium, and Servia. A new tariff was made for the United States, which increased the rates on all American

products brought into Germany two or three times higher in some cases than the rates for the other treaty nations. The general tariff had a maximum and a minimum rate, and while the minimum rate was allowed to other countries, the maximum rate was imposed on the United States. The United States was excluded from the "most favored nation" clause. This tariff was to go into effect on March 1, 1906. Diplomatic negotiations and concessions on the part of the United States deferred the enforcement of the German tariff.

The loss to American trade resulting from such a tariff will become evident, when we consider that, at that time, the trade of the United States with Germany ranked second among all the foreign countries. In 1902 United States exports to Germany amounted to $173,148,280. If the new German tariff had gone into effect, our exports to that country would have been considerably lessened, to the loss of our home industries.

9. **Protection does not increase the General Rate of Wages in a Country.** — It is true that wages are higher in the United States than in any other country. Yet the mere fact of higher nominal wages does not necessarily indicate a better status of the laborer.

Wages is a relative term. Wages bear an important relation to commodities for which they exchange. Wages are sought after, in order that when acquired they may be exchanged for all those things which make up the necessaries, the comforts, and the luxuries of life; in fine, the products of all the several systems of production.

If the high wages of the laborer will not procure for him more articles than lower wages would, his condition is not bettered by the higher wages. But the number of articles for sale in the country is reduced by protection in two ways: first, by the diminishing of imports, which will be the necessary consequence of the tariff duties; second, by the smaller output of the product from protected industries than from self-supporting industries. The supply of articles which can be procured by wages will thus be considerably lessened. The prices of things will rise because of the diminution of the supply. The prices will still further be

raised by the tariff duties. Hence, not only will there be absolutely fewer articles to exchange for the wages of the laborer, but there will be relatively fewer, because a certain fixed amount of wages will not, by reason of the increased prices, be able to obtain as many of the articles as before.

TABLE

	No. of Articles	Price	Wages	Articles Procurable by Wages
Free trade	5000	$.60	$20	$33\frac{1}{3}$
Protection	4000	$.90	$20	$22\frac{2}{9}$

In the above illustration, the number of articles for sale are absolutely less under protection, as 4000 in comparison with 5000. The number of articles procurable for a certain sum are relatively less, in view of the increased price, as $22\frac{2}{9}$ in comparison with $33\frac{1}{3}$.

Certain industries carried on in this country have been extremely productive; an immense amount of product proceeds from a comparatively small amount of capital invested. Wages in these industries are inclined to be higher here than in other countries, and in agriculture particularly the wages of our farm laborers have always been higher than the wages of farm laborers in Europe.

These very productive industries, such as agriculture, are able to pay high wages because of the great profit on the abundant product. Other industries, in order to secure labor, must compete with those high-wage-paying industries; they must offer wages at least equal to those paid by farmers, or they could not attract labor from the farming industries.

Now, before the year 1789, when this country was on a practically free trade basis, wages in the various industries then carried on in this country were higher than in European countries.

Protection did not bring about that condition. The reason of it must exist elsewhere. Again, wages are higher in England, a free trade country, than in some countries where protection obtains.

In 1880, of the total number of persons employed in agriculture, commerce, transportation, and professional services, there were about 15,400,000 who were not directly dependent for their employment on the tariff. About 1,990,000 were engaged in industries which were affected by the tariff rates, and even many of these industries could succeed though left to themselves. Now, it would be unreasonable to assert that the wages of these 1,990,000 laborers could so influence the wages of the 15,400,000 others, as to keep them permanently at a level fifty per cent higher than the wages paid abroad to foreign laborers.

It is claimed by many, therefore, that wages are independent of tariff policy, whether it be for free trade or for protection. The cause of the high wages existing in the United States is to be sought for in the immense natural resources of the country, and in the energy and activity, the skill and inventiveness, of the people. To quote from a prominent writer: "What is the reason why wages are high in the United States? It is simply because nature has lavished her gifts as never before upon an intelligent, enterprising, and industrious people. Labor and capital, when government does not force them into unnatural channels, yield a larger return than in Europe. If you invest a capital of, say, $1000 and an amount of labor equal to 1000 days' work in America, you will receive a greater product, more bushels of potatoes or wheat or pairs of shoes, than in a country like Germany. There is consequently more to be divided among all those who take part in production than in the Fatherland, and of this greater plenty labor receives a share in higher wages." (Ely, *Problems of To-day*, p. 83.)

While it cannot be said that the general scale of high wages in this country is due to protection, it must be admitted that in certain cases protective duties have enabled the industries helped by them to keep up their high standard of wages.

Protection has made these industries possible. The artificially raised price of their products enables them to obtain a profitable return in proportion to the capital and labor invested. This return is divided into profits for the capital invested and wages for the labor employed. The amount of profits and of wages will depend on the price of the product, and this price depends on the tariff. If the protection should be taken from these industries, profits and wages would disappear. In other words, the capital would have to seek other industries or other channels of investment, and the laborers would have to seek other kinds of employment.

If these industries were closed down by the withdrawal of protection, and especially if all the protected industries were obliged suddenly to retire from business, by a repeal of the tariff, much hardship would result and great disorder would ensue. Much of the capital would be lost, and ruin would fall upon many of the capitalists whose money had been invested. A great mass of laborers would be thrown out of employment, and would be forced to seek work in other industries for which they would be at first unadapted. This great increase of the supply of labor would cause the price of labor or wages to fall, and would unsettle all the industries in the country.

It is claimed, however, that if there were gradual diminution of protective duties, the forces, capital and labor, would little by little accommodate themselves to the change, and it would be found that the general wages of the country would not permanently or for any great length of time be affected.

III. Arguments for Protection

General Argument. — Just as there exists in a city a striving for existence and for a betterment of existence among the individuals who compose the city, so there is a striving for existence and for a betterment of existence among nations. The struggle for existence among the citizens of a city is carried on by each one's employing what faculties he has in whatever conditions surround him, in order to produce something of his own

which he may exchange for the things he desires. In society, each man gives out something of himself and receives from society something in return. He who gives, receives.

And there is a perpetual competition among individuals, many offering to give what is desired, and each one of the many seeking to have his own product accepted. Hence the individual efforts, the invention of means, the use made of all one's resources, mental, moral, and physical, the making the most of advantageous circumstances often merely accidental, the taking advantage of the inefficiency or the failure of others. Life is fitly called a battle, and each one is engaged in a warfare.

What goes on among individuals in a city, goes on in like manner among nations. Here again, each nation is giving something of itself in exchange for things possessed by other nations. Here again, there is a species of warfare, an invasion in which military strategy is replaced by commercial strategy, and the invading forces are not men, but products and articles of merchandise.

International trade is the means employed by nations in this great struggle for national existence and national supremacy. But international trade does not confer equal and reciprocal advantages upon all nations engaged in it. It may lead to the enrichment of the few and the ruin of the others.

"International commerce," says Gide (*Principles of Political Economy*, p. 320), "when left to take care of itself, is liable to ruin the industry of a nation, to restrict or even to stifle its productive forces, and indirectly to endanger its very existence."

To prevent the dangerous encroachments of other nations, to resist the monopoly of more advantageously placed rivals, a nation must make use of protection. Without restriction, a nation may be destroyed; with protection, a nation may guard itself against its rivals, may restrain the hurtful competition of other nations, may bring about a balance between the advantages of its own inhabitants and those of other lands.

More Specific Arguments. — The more specific arguments in favor of protection are as follows: —

1. Protection makes possible a number of industries which without it could not prosper. The silk industry is a case in point. Silk goods coming into the United States are heavily taxed by the tariff. Without such tax the domestic silk industry could not exist. Yet the extent of the industry is very great. In 1905, the value of the silk product amounted to $133,288,072. The industry employed 79,601 laborers, had an invested capital of $109,556,621, and expended $26,767,943 in wages.

Were the tariff taken off and silk goods allowed free entrance from France, Switzerland, and Japan, which countries, on account of cheap labor and greater natural facilities, can produce silk goods more cheaply than the United States, the silk goods industries of the United States would cease.

So it is of a great many other industries in the United States. If protection were to cease, the labor and the capital would have to seek other industries. They would have to seek out our self-supporting industries, such industries as enjoy natural facilities to a greater degree than other countries. But these industries in the United States, such as farming, cattle raising, and cotton growing, are few, and if all the capital and labor had to be invested in them, very little profit could be gained from any one of them. There would be a glut of capital and an oversupply of labor in the country. They would have to seek other countries.

2. If a nation should be forced to apply itself only to occupations for which the country offers special facilities, it would become stunted in its growth. We saw the disadvantage resulting to the laborer from the division of labor. Specialization in one kind of work in a factory hurts the individual by limiting the scope of his activity, by preventing his mental development, by reducing him to the nature of a machine. A similar effect will be produced, although on broader lines, on the whole nation, the activity of which is cramped by foreign competition, and the energy of which must be confined to a very limited number of industrial enterprises. The physical, mental, and moral development of the people will be retarded, and civilization will advance

with halting step. This is called the " variegated production " argument.

3. Importation of foreign products, when not counterbalanced by exportation of home goods, drains the country of its money and makes it a debtor country. Moreover, when it has no more money to send out in payment for its imports, it must borrow money from abroad in the shape of loans, and thus further plunge into debt and hasten the moment of bankruptcy. Such has been the experience of Portugal and Turkey. Even though the effect of the outgoing of money from a country is to cause exports to increase, yet this cannot be effected without a general lowering of prices, which is in itself an evil for the country. This is called the " balance of trade " argument.

4. Customs duties are the best kind of taxes, because paid by foreign countries. They save the imposition of internal taxes, and the burden falls on the foreign merchant. This is known as the " taxation " argument.

5. Protection is advantageous to the farmer no less than to the manufacturers. This is called the " home market " argument. The reasons advanced to show that it is advantageous to the farmer are two: —

First, because the farmer can find a market near by for his product in the industrial centers which grow up in his immediate vicinity. The establishment of these industrial centers is made possible by protection. The farmer is thus saved the expense of the transportation of his bulky products to distant markets. Moreover, he procures in the industrial centers a neighboring market for the more perishable products of his farm, which would be injured by distant transportation.

Second, because the farmer, by reason of the neighboring markets, can vary his cultivation and produce a number of products, instead of devoting all his land to one product. He is thus saved from the danger of impoverishing his soil. He is not so much exposed to complete failure, for, if one crop fails, others may succeed.

6. Competition among home producers tends to lower the

price of the commodities produced. It is possible that trusts may be formed, which, by buying off all competitors and by absorbing all rivals, may secure an undisputed field and fix the prices at any figure they please. The laws, however, seek to prevent combinations made in restraint of trade and with the purpose of controlling prices.

7. The greater the field that is opened for the labor of the country, the better will it be for the country. For labor is the source of wealth, and the more laborers there are actually employed, the greater the production and the more the goods, the sale of which increases the wealth of the country. Now, under protective duties, many more industries are possible than under free trade. Protection creates industries, it fosters weak industries, it hastens the establishment of industries, it keeps in existence a large number of industries. Hence, protection increases the labor of the country.

8. The aptitude for the mechanical arts, and the inventiveness displayed in the ingenious devices contrived for the easy production of great results, form a striking feature of the American character, which would find but little development were restriction placed on manufacturing industries in the United States.

9. It is better to employ American capital in the production of commodities which are needed by our own consumers, than to expend money abroad for the importation of the same commodities. In the former case, home capitalists are benefited by the returns made on their investments; home labor is employed, and the profits are kept within the country. In the latter case, foreign capital and labor are benefited, and much money goes abroad.

This is the "double profit" argument. It may be put as follows: The tariff keeps two profits at home in domestic trade, the buyer and the seller, who each reap a profit, being United States citizens. Foreign trade gives but one profit, that of either the buyer or the seller, the other party being a foreigner.

10. Protection, even though uneconomic, is justified for military and political reasons. It is a means of securing concessions

from other nations. It encourages the building of ships, arsenals, and factories for munitions.

11. The tariff may keep some of the natural resources of a new country from becoming quickly exhausted.

12. There is no one theory of Political Economy that holds for every civilization. The same forces, no doubt, may be at work everywhere, but their relative importance will differ with each country. Now the United States, a great continental nation as it is, differs from all other nations. It is still a young country, endowed with endless internal resources. It is still in a dynamic state, differing from other countries, which have reached a static condition. The aim of such a country should be to develop as much as possible its natural resources. But this can be done only by the means hitherto adopted by the United States, viz., protection. (Cf. S. N. Patten, *The Economic Basis of Protection*, 1890.)

13. To the objection made by the advocates of free trade, that owing to the tariff, articles are sold cheaper abroad than at home, the protectionists answer that the practice of selling abroad cheaper than at home is carried on by all nations. This practice is not due to the tariff, they say, but to one or several of the following reasons: —

Cash payments and large purchases in the foreign trade, whereas the domestic trade is based on credits and small purchases.

The drawback or rebate of the tariff on imported raw material of goods manufactured for export.

To overcome the tariffs of other countries.

To secure new markets.

To hold a market against new competitors.

To clear out surplus stock or to prevent a shutdown or increased cost of production by keeping mills running and men employed.

To get rid of samples and out-of-date goods.

Because the expense of selling and advertising is less abroad than at home.

Even though the cheaper foreign price were due to the tariff, the amount sold at lower prices abroad is not five per cent of the total exports of manufactures.

IV. Arguments for Free Trade

The advocates of free trade answer the main arguments of the protectionists (1–6, following) and then present specific arguments for free trade (7–20, following).

1. The "infant industry" argument strenuously advocated at one time by protectionists is now invalidated because protection was not withdrawn after the infant industries had attained their maturity. On the contrary, protection is still defended; but, whereas formerly protection was declared to be needed because this new and young country had to repel the competition of foreign lands and prevent itself from being crippled by wealthy nations, now, when the United States has grown wealthy, it is declared that protection is needed against the cheap labor and the cheap products of foreign lands.

Again, European nations declare that they need protection because they are old and must compete with new countries.

An argument that can be so twisted about and be made to serve in both cases can have very little intrinsic worth.

2. The argument that protection diversifies the industries of a country may be admitted, but this same result would follow spontaneously and with less attendant hardships under free trade. Labor is scarce in a new country and industries are necessarily circumscribed, but gradually the population increases, laborers become more numerous, industries grow in numbers and diversity. Protection brings about this result, but effects it at the price of very onerous conditions; capital and labor are deflected to less profitable industries; there is a general rise of prices which must be paid by the home consumers; the cost of production is increased.

It is impossible to believe that, with resources so abundant, with so favorable a geographical position, with a people so in-

dustrious and inventive, this nation would not, though unaided by any protection, arrive in time at the front of all competition and outstrip all foreign nations. Without protection the result might be delayed, but there would have been more markets for our goods, commodities would have been cheaper, and the vast army of laborers would have been able to get relatively more for their wages.

3. The "balance of trade" argument is futile, because exports and imports tend to equal each other. When exports exceed imports in a country, money flows into the country. Prices will rise. The country will become a poor market for foreigners to buy in, and exports will decrease. The exports will not long remain in excess of imports, and the supply of money will not be permanently increased.

4. The "taxation" argument is false, if not wholly, at least in great measure, because foreigners pay but a small share of the tariff rates. Ultimately, the burden falls on the home consumer. And even if the argument be admitted, other nations, by their protective duties, will impose on us the burden of paying their taxes.

Furthermore, if the price of the foreign article is not raised, and if the foreigner really pays the tariff rate, protection has missed its aim. The object of the protective duty was to exclude the foreign article by forcing a rise in its price. If, then, the price is not raised, because the foreign producer bears the burden, foreign competition is not prevented and protection is ineffective.

5. To the argument of the protectionists, that under protection producers are enabled to sell their products in neighboring markets and thus save the great expense of transportation, it is asserted that, owing to the increased facilities of our railroad systems and the low freightage by rail and steamship due to increased competition, the cost of transportation is comparatively small. Moreover, the burden of paying the transportation charges is borne in greatest part by the foreign consumer. Otherwise, it would not be profitable to export.

6. Protection raises the prices of all commodities at home. The price of the foreign article is increased by the tariff duty. The home producers fix their price slightly below the price of the foreign article. Thus, all prices are artificially raised, and the burden falls on the consumer.

Even when increased efficiency has made it possible for home producers to reduce the cost of production, and thus reduce the price of the product, they seldom do so; instead, it is possible for combinations to be made to keep the price at the former level, in order to secure wholly unreasonable profits. Free traders assert that this is done, and in proof they point to the fact that many of our home products are sold abroad at lower prices than at home.

7. Protection increases the cost of living and prevents a decrease in that cost. Living is cheaper in England and in Belgium, free trade countries, than in France or the United States. Under protection the price of all commodities is raised. The consumer pays yearly an immense sum to the producers.

8. Protection is class legislation. The producers are benefited at the expense of the consumers.

9. Protection injures national production by increasing the cost of raw materials, implements, machinery, and the many things which enter into productive enterprises.

10. Protection reduces imports and consequently exports.

11. Protection injures and hinders industrial progress by cutting off foreign competition.

12. International trade is like internal trade. The freedom of our internal trade is the great source of its extraordinary expansion; so, the more free our international trade is, the greater will be the advantages for home and foreign producers. There will be more consumers for goods.

13. Under free trade every one is able to buy in the cheapest market and sell in the dearest, so that the gains of all will be at a maximum.

14. Under free trade, every nation will be able to develop to

the utmost its natural advantages, and the world's wealth will be increased.

15. Protection involves political corruption.

16. Protection brings about national animosities and tariff wars.

17. Protection does not increase wages. More capital is wasted in materials and less is to be had for wages. Moreover, it raises prices for consumers and thus counteracts any increase of wages.

18. Protection fosters trusts with all their attendant evils.

19. Protection extorts high prices at home, where it has a monopoly, and sells to foreigners at lower prices. Adam Smith declares that this is inevitable under the protective system.

20. Protection makes orderly public finance impossible. There are huge revenues and extravagance.

QUESTIONS

1. Give a brief historical sketch of protection in the United States. How was the policy of protection introduced in the United States?
2. Mention the principal tariffs.
3. What tax was imposed by the Payne tariff law?
4. What are the important provisions of the Underwood bill?
5. Show by example how protection increases the industries of a country.
6. What is the effect of protection on labor and capital? How does it establish less productive industries in place of more productive industries? Give examples.
7. Why should protection be temporary?
8. Show by examples how the burden of raised prices falls on the consumer.
9. Why should protection be limited?
10. How does protection reduce foreign trade?
11. How does protection tend to cause international animosities?
12. What is your opinion about the connection between protection and wages? Does protection raise wages in a country?
13. Give the main arguments for protection.
14. Give the main arguments for free trade.

CHAPTER XV

TRANSPORTATION. RAILROADS

Transportation aids Production. — Transportation is an aid to production, and hence it takes its place in this division of Political Economy. It was formerly thought that transportation had no part in production. It was claimed that only those agencies were productive which actually created materials. The mere transporting of materials already existing from one place to another was not considered as in any way entering into the idea of production.

But transportation really has the effect of creating new values in certain objects, of practically creating valuable materials out of materials which otherwise would have had no value and consequently no economic existence. Commodities which are produced in great abundance in one place and which, because of slight demand, would have little or no value there, are transported to other places where the demand is great, and hence acquire value. Change of place gives value.

Transportation, again, produces wealth, because it makes possible countless industries which otherwise could never be undertaken. The facilities of transportation over roads or waterways are among the greatest advantages a country or town can have, and they have caused the wealth and prosperity of many of the great commercial centers. The coast towns of Europe and of the United States owe their commercial progress to their location. The same may be said of the flourishing cities built along the great rivers and lakes of our country. The Erie Canal through New York state has brought wealth to the towns along

its course. It would be difficult to estimate the value, to the cities of the Mediterranean, of the Suez Canal, opening to them, as it does, all the markets of the East. And in our own day we have been able to see the advantages to the mid-continent countries that are derived from the Panama Canal. The project now earnestly advocated, of opening up the Mississippi so that ocean vessels could reach the ports along that great waterway, would prove of incalculable value to all the middle section of our country.

Kinds of Transportation. — There are various means serviceable for transportation — dirt roads, made roads, canals, railroads, with the conveyances which may be respectively used — carts, wagons, boats, barges, cars. The method of transportation to be constructed between any two points will depend on the traffic.

It would not be economic to build a concrete or macadamized road where, on account of the small amount of the traffic and the rough nature of the transportable materials, a dirt road would be amply sufficient for the safe transportation of the commodities. Nor will a railroad economically replace a turnpike unless the traffic is large and valuable enough to warrant the expensive outlay and give promise of sufficiently reasonable profits for the investment.

The natural waterways, rivers, lakes, and oceans, are the cheapest means of transportation, and an enormous amount of merchandise is shipped in this way. Transportation by water is used even when it would be possible to use railroads, as along the coast and on rivers. Certain classes of merchandise not perishable and not of immediate need at the points of destination can be sent cheaper by water than by rail.

Canals are cheap, one cent a ton mile being considered a paying rate. They compete with railroads when there is question of heavy, slow-moving freight. In temperate climates, however, they are subject to changes of the seasons, ice in winter and droughts in summer impeding and at times wholly stopping their efficiency.

Growth of Railroads. — Railroads have, during the past fifty years, made immense progress in the field of transportation, and almost wholly monopolize traffic in regions where no waterways exist, superseding the pack mules and wagons of the past, and even along the waterways competing with canals, rivers, oceans, and lakes. They offer the advantage of rapidity of transportation, an essential item in the case of many kinds of perishable goods Owing to the immense amount of business done, they can afford to lower the rates or charges to a very reasonable figure, while, owing to improvements made in road-building, in cars, and in general equipment, they invite traffic by the safety and facilities offered.

Railroads have a special advantage over waterways in being able to choose their own routes, to pass over, around, or under mountains. They are besides more certain and more constant, being less subject to climatic conditions, and better able to remedy quickly any material disasters which they may have suffered.

Because of these and many other advantages, railroads in every important country of the world have increased enormously in number, in length of lines, in equipment of cars and engines, but nowhere to such an extent as in the United States.

It will be interesting to note the number of miles of railroads in our own and foreign lands. The figures may help us somewhat in understanding the importance of the railroad question, now so prominently before the public attention.

MILES OF RAILROAD

1920	Europe	210,110
	America	367,544
	Asia	71,555
	Africa	28,829
	Australia	24,988
	World	703,026

(*Railway Statistics of U. S.*, 1920.)

The railroad growth in the United States, by decades, was: —

Year	Miles	Year	Miles
1830	23	1880	93,262
1840	2,818	1890	167,191
1850	9,021	1900	198,964
1860	30,626	1910	249,992
1870	52,922	1918	264,233

(Cf. Stat. Abstr., 1920, p. 811.)

Cost of Railroads. — The building of railroads is much cheaper in the United States than in other countries, as may be seen from the following table: —

Year	Country	Average Cost of Construction per Mile
1909	United Kingdom	$274,964
1908	Belgium	180,860
1908	France	141,920
1908–1909	Italy	125,205
1908	Austria	115,130
1908	Switzerland	114,461
1909	Germany	111,737
1907	Russia	79,136
1909	Canada	64,740
1909	United States	59,259

(Cf. *Railway Statistics of U. S.*, 1911, p. 67.)

Conditions affecting Railroad Building. — The conditions affecting the building of railroads in the United States have been quite different from those obtaining in Europe. When the construction of railroads began in the several countries of Europe, those countries were for the most part well populated. The cities, towns, and hamlets, the productive regions, the various manufactories and centers of trade had been already

established for a long period. The builders of railroads had but to take a map of the country and draw the various lines of road uniting great cities, connecting the main markets with the productive belts and the industrial centers. Sufficient capital had to be procured to buy up numerous estates and properties, and to secure the right of way through town and hamlet. The roads were built through the midst of civilization.

Not so in the United States. Here frequently the railroad was the pioneer of civilization. Forests were hewed down, hills leveled, valleys built up and the tracks laid out into a wilderness with a terminal thousands of miles distant and to be reached possibly only in the next generation.

In Europe, an existing traffic was to be accommodated by the railroads; in the United States, traffic was to be established. In Europe, the towns and stations were linked together by the lines; in the United States, towns and stations, which gradually grew into cities and towns, were to be established along the newly built road.

The railroads themselves encouraged and aided the civilization of whole tracts of country, in order to increase their traffic.

In Europe, there was no competition between various roads. If one line sufficed for the traffic, only one was built. In the United States, competition was rife, and sometimes attempts were made to build even two or more direct lines between two points.

Group	Mileage	Stocks	Bonds
Vanderbilt	24,810	$620,300,000	$ 754,900,000
Pennsylvania	19,840	768,300,000	569,700,000
Harriman	28,751	951,600,000	1,235,500,000
Hill-Morgan	13,110	386,600,000	422,900,000
Morgan	13,212	568,220,000	540,915,000
Gould	21,341	533,408,000	814,600,000
Moore-Reid	27,910	364,500,000	482,900,000
Rockefeller's	16,309	253,700,000	310,500,000
Walters'	11,143	147,600,000	199,300,000
Hawley	12,310	339,688,000	520,400,000

Groups of Railroads. — Competition is naturally followed by consolidation, and hence several great groups of railroad systems have been gradually built up in the United States. These groups may be seen in the preceding table.

Business of Railroads. — The business of the railroads in this country is enormous, and entails an immense outlay of money to meet the expenses and the interest on the capital invested. This may be seen by consulting the following tables.

TABLE I

Year	Passenger Mileage	Freight Mileage	Traffic Earnings	
	Miles	Miles	Gross	Net
	In millions		In millions of dollars	
1882	10,484	39,302	764	278
1890	12,521	79,192	1,086	242
1900	16,313	141,162	1,501	483
1905	23,906	187,375	2,112	685
1910	32,388	256,682	2,804	919
1918	42,676	405,379		

(Cf. *Poor's Manual of Railroads*, 1911. Cf. Stat. Abstr. U. S., 1920.)

TABLE II

Year	Mileage	Capital Stock	Debt		Cost Total	Construction Per Mile
			Bonded	Float'g		
		In millions of dollars				
1880	93,262	2,708	2,530	162	5,402	$58,624
1890	167,191	4,590	5,055	375	10,020	61,343
1900	198,964	5,804	5,758	328	11,891	61,884
1905	225,196	6,741	7,821	201	14,563	68,038
1910	249,992	8,380	10,510	455		
1918	264,233	9,055	11,729			

(Cf. *Poor's Manual*, 1911. Cf. Stat. Abstr. U. S., 1920.)

TABLE III

YEAR	INTEREST	DIVIDENDS
1890	$221,000,000	$ 87,000,000
1900	252,000,000	140,000,000
1905	310,000,000	238,000,000
1910	399,000,000	405,000,000
1918	396,000,000	339,000,000

(Cf. Stat. Abstr., 1920, p. 340.)

TABLE IV

YEAR	NUMBER EMPLOYEES	COMPENSATION
1894	779,608	$ 447,000,000
1900	1,017,653	577,000,000
1905	1,382,196	839,000,000
1910	1,699,420	1,143,000,000
1918	1,837,663	2,606,284,245

(Stat. Abstr., 1920, pp. 353, 354.)

Railroads as Private Concerns and as Public Concerns. — In other countries the railroads for the most part are government concerns wholly or in part. In the United States they are private, because

1. They have been organized and are managed by private individuals. Such men as Vanderbilt, Morgan, Hill, Harriman, have been the great promoters of the railroads of the country.

2. They have been capitalized by private capital. This capital is owned by thousands of private individuals who hold the stocks and bonds of the railroads. Trustees invest their trust funds in railroads. Banks so invest the money of their depositors. Insurance companies and educational institutions hold many stocks and bonds of railroads.

Value of railroad securities held (about 1906) —

By Insurance Companies	$ 845,889,038
By Savings Institutions	571,031,277
By Educational Institutions	47,468,327
Total	$1,464,388,642

(Cf. Newcomb, *Facts about Railroads*, p. 92.)

Railroads, however, are in some respects public concerns. (Cf. Fetter, *The Principles of Economics*, p. 534 *seq.*) Railroads have been granted by charter or by franchise the right of eminent domain. This right is not enjoyed by private manufacturers.

The primary object of railroads is to benefit the community, and it was for that purpose that they were given material aid by the various state governments. Money and land were bestowed on them. They were granted privileges by states, cities, and towns, in the competition that existed, to secure the advantages of railroads. Bonds, bonuses, exemptions from taxes were granted by counties, townships, and cities.

The national government followed the same policy. It granted large tracts of public lands to the railroads. In 1850 a great strip of land from north to south in Illinois was given by the United States government to Illinois for the Illinois Central Railroad. In fourteen states, over ten million acres of land were given to the railroads. Between 1862 and 1871, the United States government aided the Pacific railroads by a grant of twenty square miles of land for every mile of track, and by a loan of $50,000,000.

Consequences of these Two Facts. — There are certain consequences flowing from the fact that the railroads are at once private and public concerns.

As private concerns, the managers and owners of railroads are to be encouraged by the government in the carrying on of the railroad industry, just as other private concerns are encouraged. Special restrictions, unjust and overbearing, crippling and destructive of enterprise should no more be allowed in

regard to railroads than in other private concerns. The capital invested is entitled to a certain just remuneration for its use and for the risks run by the capitalists. Arbitrary and extreme measures that tend to impede and stultify the efforts of the able managers of railroad business, and cut off the returns due to their ability and shrewdness, will work injury not only to the few millionaire owners of the roads but to the thousands of poor and moderately wealthy, whose money is invested in railroad stocks and bonds.

As public concerns, the railroads owe a duty to the public, which must be superior to the duty owed to private stockholders and owners. Railroads must be looked on from a social, rather than from an individual, point of view, and they should not subordinate public interests to private gain. They should observe the conditions on which in most cases the special charters and franchises and great privileges were granted them. These conditions by implication, if not explicitly, guaranteed the rights of the public.

The main difficulty in this matter consists in harmonizing the consequences that arise from the twofold character possessed by the railroads, as private and public concerns. The effort to do so is being made to-day in this country.

There are the two extremes. Some hold that railroad corporations are merely private businesses similar in their private character to all other private manufacturing and productive enterprises. They contend that, just as any governmental intervention looking towards regulation or management of private industries would be considered an act of unwarranted tyranny and injustice, so also any effort of the government to meddle with railroad business or management must for similar reasons be condemned.

Others hold that railroads are purely public utilities that owe their existence to the beneficence of governments, which have conceded to them vast areas of land, valuable privileges and franchises, the undoubted property and prerogatives of the public. As public utilities, they owe their first duty to the

public. Since, however, they have come to be controlled by unscrupulous owners and directors, who seek only the increase of dividends and ignore the rights of the public, there has arisen imperative need that the government determine the limits of their power, regulate their management and service, and put an end to recognized abuses.

These two extremes will always have their defenders, yet the general public opinion is gradually sifting the matter, and there is being formed a view that lies midway between the two extremes and would reconcile both, safeguarding at once the rights of the railroads and of the public.

Power of Railroad Managers. — The outcry against the railroads seems to have a certain foundation when one considers the power that resides in the hands of the railroad managers.

They have power to affect prices by the traffic rates imposed on all classes of commodities. They may build up or destroy towns and cities, and even whole territories, by changing routes or by regulating the service of their roads. They may crush wholly the business of private individuals who may have incurred their enmity. They may enter into and take part in commercial wars that exist between rival interests and may support the one and destroy the other.

They maintain, it is claimed, lobbies in the federal legislature and in all the state legislatures, with the purpose of taking note of the legislative measures brought forward by these bodies, and they may by bribery and intimidation procure the passage of bills favorable to their interests and prevent the passage of laws inimical to them.

By the establishment of construction companies, whose heads may be the directors of the roads, the directors may find means of enriching themselves. Stockholders' interests are held to be paramount. Dividends must be paid, no matter how the money is got. Often the service of the road suffers, the wages of the employees are reduced, and the prices of service raised, in order to secure the means of paying the dividends.

If the manager of one road is powerful, how much more so

will he be if he can acquire other roads! Hence consolidation is sought. To-day five interests own 50 per cent of the railroads of the United States.

Overcapitalization. — Overcapitalization may be resorted to, with the result that prices will be raised and must be paid by the users of the railroad service.

Overcapitalization exists when the capital is arbitrarily raised to a figure over and above the actual and real value of the possessions of the railroads. For example, the franchise rights, rolling stock, stations, terminals, roads, etc., of a railroad company may be fairly worth twenty millions of dollars, and the capital should be fixed at that figure. But if the capital is raised to forty millions of dollars without any increase of property, by giving to the stockholders additional shares for which no actual money is paid, we should have a case of overcapitalization.

The profits of the road, which rightfully should pay dividends on the twenty millions of actual capital, must now pay dividends also on the fictitious twenty millions of capital that have been arbitrarily added to the real capital. Thus the profits will be consumed, and, if not sufficient under ordinary circumstances, they must be increased by exorbitant prices charged for the traffic service of the road.

In a discussion carried on in Congress in 1906, it was asserted that American railroads were overcapitalized to an enormous extent, and that thence arose the exorbitant charges for traffic against which the shippers were protesting.

The assertion was vigorously contradicted by defenders of the railroads. The agitation, however, brought about the introduction of a clause in the railroad bill that would allow the Interstate Commerce Commission to investigate the condition of the various railroads and to ascertain the fair value of the property of every railroad engaged in interstate commerce. The object of the bill, it was declared, was to conserve and protect, not to injure, the efficiency of the roads. The bill passed the House (May, 1910), but this particular clause of the bill calling for the

physical valuation of railroads was rejected by the Senate (June 1, 1910). Finally, on March 1, 1913, a bill providing for the physical valuation by the Interstate Commerce Commission of railroads, express companies, telegraph and telephone companies, such valuation to serve as a basis for rate regulation, was signed by the President and became a law.

The task is a huge one and difficult to perform in such a way as to obtain a satisfactory basis of evidence for the determination of equitable rates. The investigation will require a detailed examination of all the various real properties owned by the roads, and when to these items there are added the intangible franchise rights and opportunities of the roads, it will be clear how difficult it must be to arrive at definite figures in the final calculation of the value of the roads.

Railroad Charges. — One of the most difficult problems in the railroad business is the calculation of the charges or rates to be made for railroad service. The difficulty consists in finding a common basis for all the individual services rendered. In determining the price of commodities, the basis taken is the cost of production. The price is brought more or less near the cost of production. No such basis exists for rates and charges in the railroad business.

It has been claimed that the cost of service might be taken as a basis for charges. This would not prove practicable, for it would be almost impossible to estimate the cost of service. At times, the preponderance of the freight-carrying business may be from terminal to terminal over long distances — through freight; at times, it may be local. The changing conditions would be subject to no law, and yet the cost of service would vary according to these varying conditions.

The railroad expenses which the charges have to meet are the operating expenses and the interest to be paid on the capital invested. The interest is estimated to amount generally to 40 or 50 per cent of the total expenses. The operating expenses are divided under various heads, part of which will vary according to the amount of traffic, an item which can never be

accurately calculated. Where such changeable conditions exist, it must be almost a hopeless task to estimate the value of the service and the relation it ought to bear to the total expenses.

Again, the cost of service in transporting a train load of merchandise to any point will vary according to whether the cars return to the starting point loaded or empty. Cars returning loaded would partly compensate for the first transportation; cars returning empty would be a loss to the road.

Moreover, it costs more to move a thousand dollars' worth of coal than a thousand dollars' worth of silk goods, yet it would be impossible to charge the coal at the rate of the cost of service. If the charge of the silk goods were determined by the cost of service and the charge for the coal were fixed proportionately to the charge of the silk goods, the charge would be so great that it would prohibit the transportation of coal. In like manner, the charge for transporting New Jersey wheat to New York might be determined by the cost of service, but if the New Jersey rate were charged for carrying Dakota wheat to New York, the charge would be so high that it would not pay to transport Dakota wheat.

Rates, then, are not determined by the cost of service.

The railroad is a monopoly. It can fix monopoly prices for its service. It is influenced in fixing its rates by self-interest. This self-interest leads it to increase its traffic as much as possible, and consequently it charges "what the traffic will bear."

To illustrate, let us take the case of Dakota wheat shipped to New York : —

Cost of production to the Dakota farmer	$ .10 a bushel
Price of wheat in the New York market	.60 a bushel
Railroad charges — Dakota to New York	.20 a bushel
Cost of production and transportation to farmer	.30 a bushel
Profit to farmer	.30 a bushel

The railroad might charge 30 cents or 40 cents for transportation, but it is prevented : —

1. Because of the competition of other lines. This competition, however, is often avoided by pooling and combinations.

2. Because the railroad desires to increase its traffic in wheat. The lower the rate, the more wheat will be shipped, and the more profit the road will make.

The amount that shall be charged by the railroad is thus described: "The amount of the charge for any particular service is the product of a definite rate applicable between the points of origin and destination, or for the distance traversed, and to the commodity or class of passengers carried, multiplied by the number of persons or the weight of the freight." (*Encyc. Amer.*)

Rates are lower in Europe for passengers than in the United States, but this is due to the fact that there are several classes, first, second, and third, in the passenger service, and as a rule the service is much less satisfactory.

It has hitherto been generally conceded that the rates in this country have not been excessive, and during the twenty-five years prior to 1910 there had been a gradual decrease in freight rates, because of the introduction of better methods and a more economic administration of transportation.

The passenger rates have been but little changed in the same period as compared to freight rates.

Year	Freight Rates Per Ton Per Mile	Passenger Rates Per Mile
	Cents	Cents
1885	1.057	2.199
1890	0.927	2.174
1895	0.839	2.069
1900	0.746	2.031
1905	0.784	2.028
1909	0.757	1.934
1918	0.849	2.414

(Cf. Stat. Abstr., 1920.)

Many concessions have been made by the railroads. Mileage books are issued. Suburban passengers are treated to wholesale terms. Wholesale rates are given to conventions.

Rating introduces two important elements into railroad business, classification and discrimination.

Classification. — Classification is the apportionment of commodities into different classes determined by various conditions of traffic accommodation, the nature of the commodity, the quantity of the commodity in different sections of the country, and the naming of a fixed price or rate for each class in transportation.

Classification may have reference to passengers, who are carried way or express, ordinary or Pullman, but it generally has reference to freight.

Classification is determined (1) by the nature of the commodity: local or through; carload or not so; cheap goods or dear goods.

(2) By conditions of accommodation: special cars (refrigerators, oil tanks, coal cars); the need of facilitating new traffic; the manner of packing (live stock, crockery, powder).

(3) By the quantity of the commodity in different sections of the country: shoes in New England, wheat in the West.

Classification is necessary, as may be seen from the variety of the commodities carried by the railroads: —

		Tons
1918	1. Agricultural products.	9.9 per cent of traffic
	2. Animal products	2.7 per cent of traffic
	3. Mineral products	54.8 per cent of traffic
	4. Forest products	8.3 per cent of traffic
	5. Manufactures	16.3 per cent of traffic
	6. Merchandise.	3.7 per cent of traffic
	7. Miscellaneous	4.3 per cent of traffic

(Cf. Stat. Abstr., 1920, p. 342.)

These seven heads embrace between 9000 and 10,000 kinds of commodities. It would be impossible to have rates for each commodity. Hence, general classes are made out.

There are three main classifications: —

1. Official — east of the Mississippi and north of the Ohio and the Potomac. It has 8 classes.

2. Southern — east of the Mississippi and south of the Ohio and the Potomac. It has 15 classes.

3. Western — west of the Mississippi. It has 10 classes.

There is also the transcontinental classification, used for freight between the Atlantic and the Pacific. Again, a special classification embraces commodities destined for export trade.

There are also the "special commodities" rates, issued by railroads to help some special new commodity. There are over 1000 such special tariffs.

Several states have special classifications, made by state legislatures or state commissions, as Illinois, North Carolina, Florida, Iowa, Georgia.

A single uniform classification would be better for trade, because the transportation costs could be computed by the shippers and discriminations could be more easily detected. But it does not seem practicable.

Discrimination. — Discrimination is the granting of special favors in regard to rates or accommodation to certain individuals or localities. It is of two kinds: personal and local.

Personal discrimination may be practiced by the granting of free passes to passengers, or by charging different rates and according different accommodations to different persons.

The causes that lead to personal discrimination may be —

(1) a desire to build up a new business which may need specially low rates in order to exist or as an inducement to put its product on the market;

(2) the competition which exists between railroads, each of which strives to secure the transportation trade of wealthy producers;

(3) the attempt to gain the good will and assistance of large shippers, whose influence in railroad legislation and railroad grants may be of moment;

(4) the desire to build up a business in which the railroad officials are interested.

Local discrimination exists when railroads favor one locality, town, city, or section of country more than another, in the matter of rates or in the granting of accommodations, fast trains, exact schedules, or suitable cars. Through such discrimination, local rates are high, through rates low; domestic trade is made to pay a high tax, while foreign trade is allowed cheap rates; one seaboard city may have to submit to exorbitant charges, while another is specially favored in the charges.

It is not easy to find all the various causes that lead to local discrimination. Some of the causes, however, are: —

(1) Water competition, as when boat lines and barges and steamers, coastwise and on lakes and rivers, compete with railroads and lead them to reduce charges between points that enjoy such waterway advantages.

(2) Better terminal facilities in one city than in another, affording the means of shipping goods abroad.

(3) The competition of other lines of railroads.

(4) The influence of powerful corporations and favoritism shown by the railroads.

(5) Trade competition and rivalry between communities, leading them to grant special favors to the roads in the assured hope of receiving special favors from the roads in return.

The effect of any kind of discrimination is to cause uncertainty, fear, and danger in business. In all businesses, transportation cost enters as an important item and must be calculated in estimating the amount of capital required, the outlay for wages and salaries, the amount and cost of product; and when the transportation charges may be changed at the will of the railroad officials and made excessive for personal or local reasons, no certainty of one's financial standing can exist, and no assurance of ability to fulfill contracts.

Discrimination may build up one man's business at the expense of another; it may build up or it may destroy fortunes, cities, towns, and even whole districts of the country.

QUESTIONS

1. How does transportation aid production? How does it affect the wealth of a country?
2. What determines the building of different kinds of roads for transportation?
3. How do railroads in the United States compare with railroads in foreign countries in regard to growth?
4. How would you account for the different costs of construction per mile of roads in the United States and in other countries?
5. How did the conditions of road building in the United States differ from those in other countries?
6. Mention the principal groups of railroads in the United States. From a study of the tables given (pp. 281, 282) estimate the amount of business done by the railroads.
7. Why are railroads private concerns? Why public concerns? What consequences flow from the fact that railroads are at once private concerns and public concerns?
8. Explain how the railroad managers acquire power.
9. What is overcapitalization? What are the difficulties in the way of estimating the physical valuation of railroads?
10. Why is cost of service not the basis for determining railroad charges? On what principle are railroad charges made? What is the general opinion with regard to railroad rates in this country?
11. What is railroad classification? How is it determined? What are the main classifications?
12. What is discrimination? What are its kinds? Its causes?

CHAPTER XVI

REMEDIES FOR RAILROAD EVILS. GOVERNMENT OWNERSHIP OF RAILROADS

I. Remedies for Railroad Evils

Evils of Railroads. — Classification is not objected to, where there is evident reason for it. Such reason exists, for example, when there is greater risk attendant on the traffic, when breakable or perishable goods are moved and special care is required in their handling; when live stock is carried, demanding extra labor on the part of the employees. Frequently, however, the classifications scheduled by the railroads are arbitrary, haphazard, discriminating, and unjust, and then classification may be a real evil.

Discrimination, both personal and local, is the main evil of railroads. It is against this evil that the greatest outcry has been made.

The shippers who must use the roads for the transportation of their products are at the mercy of the carriers, and can be driven out of business by the exaction of unfair or exorbitant rates.

Rebating is an evil which consists in the railroads returning some portion of the public scheduled charges to a shipper, so as to discriminate in his favor in the matter of rates. Some producers use their own cars in shipping their goods, and this opens the way to discrimination, as the producers claim a rebate because the railroad does not supply the rolling stock. Some 125,000 cars are thus owned by producers. The tendency at present is for the railroads to own all the cars moved by them.

As already stated, the amount of the rates charged by railroads for transportation has not generally in the past been considered a serious evil. The rates themselves, when there

existed no discriminatory feature in them, have been as a rule considered reasonable.

But in the year 1910, a determination was shown on the part of railroads throughout the country to increase their rates. The proposed increase in the freight rates amounted to from 10 to 50 per cent over the old rates. Some of the Eastern lines advanced their passenger rates 12 per cent.

The reason and necessity of the increase in rates were to be found, it was claimed by the roads, in the increase in wages to employees, in cost of materials, and in taxation, all of which demanded a readjustment of rates.

Earnest protests were made by the shippers throughout the country against these arbitrary advances in rates. It was contended that the earnings of the roads had never been so great as at the moment of the proposed rate increase, that the dividends paid by the roads were exorbitant, that overcapitalization existed among the roads, and that, on this account, excessive charges were needed in order that returns might be paid on the watered stock.

The increase of rates by the railroads was prevented by the Interstate Commerce Commission. In 1914, however, when application was again made by the railroads to the Commission for a 5 per cent increase in freight rates, the increase was granted (July 29, 1914) to railroads in the western portion of the Official Classification territory, and later (Oct. 18, 1914) extended to all the territory. The increase affected all-rail freight, except coal, coke, and iron ore. The principal reasons for the granting of the increase were the effect of the European war on railroad business, the reduced revenues of the railroads, and the increased cost of materials.

Remedies. — The remedies actually employed in the United States include actions at law and the activities of state and national commissions.

1. **Action at Law.** — Against the evils we have mentioned, there existed always the remedy in law for the shippers. They could bring their cases into court. But the remedy was slow

and costly. It was difficult for small dealers to contend against the array of legal talent and wealth possessed by the powerful railroads.

2. **State Commissions.** — Most of the states have recognized the need of a remedy, and have appointed state commissions to examine complaints brought by shippers against the railroads. The legality of these commissions has been upheld by the courts.

State commissions have done little in the way of remedying the evils complained of. They have done something, but their action is necessarily circumscribed. They can regulate traffic only within the limits of their own states. And very often there existed no uniformity between the regulations of adjoining states, or even in the views of railroad evils held by different states. In some states (*e.g.* California) rebates were not unlawful.

3. **Interstate Commerce Commission.** — The Interstate Commerce Commission was established in 1887. The general provisions of the law instituting the commission were that the commission should (1) see that the rates were just and reasonable; (2) prevent pooling, in order to encourage competition; (3) see that rates were fixed according to the long-and-short-haul principle.

The commission was composed of five (later seven) commissioners appointed by the President. It was not a judicial court. Its office was merely to consider the facts as presented in any case of complaint brought by shippers against the railroads. Appeal could be taken from its decisions by the railroads to the courts. The commission had not the power to fix any particular rate. It could, however, declare any particular rate illegal.

The commission proved inefficient. It lacked the power to enforce its decisions and to correct abuses. Several acts were passed by Congress to increase the power of the commission.

The Elkins Act (February 19, 1903) made rebates and discriminations misdemeanors punishable by a fine of not less than $1000 and not more than $20,000.

The Hepburn Act (June 29, 1906) gave a broader definition to the words " railroads " and " transportation," so as to include within the jurisdiction of the commission the regulation of private cars and terminal charges. Power to establish a rate or to declare what will be a proper charge in any special instance was conferred on the commission, but only in cases where complaint was made. The commission could not take the initiative in rate making. A penalty of imprisonment of not more than two years was added to the penalties contained in the Elkins Act. The commission was to consist of seven members instead of five.

The act contained an important clause, the " commodities " clause, which forbade railroad corporations from continuing the ownership of the sources of the commodities which they transported over their lines. The object of the provision was to prevent the railroad managers from having undue advantage, as owners and carriers, over other business concerns, which were only owners of commodities and had to depend on the railroads as carriers of their product. This clause took effect May 1, 1908. (Cf. *Journal of Polit. Econ.*, April, 1908, p. 235.)

The Mann-Elkins law (June 18, 1910) was a further effort to give more efficiency to the Interstate Commerce Commission. The jurisdiction of the commission was extended to telegraph and telephone lines; the long-and-short-haul principle was made effective; the commission was empowered to investigate and pass upon any infraction of the law by a railroad without waiting for a complaint of the aggrieved party, and to suspend for a considerable period any proposed increase of rates, while the proof of the reasonableness of the proposed increase was put on the railroads.

After the declaration of war against Germany and Austria (April 6, December 7, 1917), the President, by proclamation dated December 26, 1917, assumed possession and control of nearly all systems of transportation in the United States. To carry out the provisions of the proclamation, the Federal Control Act was passed March 21, 1918. The operation of the railroad systems was taken over by the United States Railroad Admin-

istration. It was admittedly an emergency measure, made imperative by the exigencies of the war. Such unity of control was necessary to facilitate the transportation of troops, war material, and equipment.

The Esch-Cummins law, known as the Transportation Act, passed Feb. 28, 1920, restored the railroads to private ownership, and sought by legislative measures to reëstablish the credit of the roads, help them finance their requirements for extensions and betterments, and furnish a more effective medium of railroad regulation.

The membership of the Interstate Commerce Commission was increased to eleven members. The commission was given a greater measure of authority and responsibility in relation to railroad regulation and the settlement of the numerous railroad difficulties. It was authorized to determine as nearly as possible the aggregate value of all railway property used in transportation, with a view to fixing the passenger and freight rates of the roads. The railroads were guaranteed, for a period of two years after the passage of the act, a return equal to 6% of the aggregate value of the railroad property. After the two-year period, the commission was so to fix the rates that a reasonable return (6%) would be assured to the roads. All that was gained above the reasonable return was to become the property of the government to be used as a reserve fund and dispensed in furtherance of the public interest in railway transportation either in purchase, lease, or rental of transportation equipment and facilities, or in loans to the carriers. A nucleus for this fund was immediately created by the appropriation of $300,000,000.

For the settlement of labor disputes, the commission was given power to appoint Railway Adjustment Boards upon application of parties in dispute, and, for final adjudication of disputed questions, there was established a Railway Board of Labor Appeals composed of nine members, three of whom were representatives of labor, three, of the railroad employers, and three, of the public.

II. Government Ownership of Railroads

The inadequacy of government regulation of railroads, as manifested hitherto in both state and federal legislative measures, has led to the conclusion in the minds of many, that the only solution of the difficulty lies in government ownership of all the railroad systems. The Post-Office system is in the hands of the government, and is administered with practically general satisfaction. The fact of a deficit annually occurring in the Postal department in years past has been habitually quoted, but the possibility of curtailing expenses in the department has been shown in recent years, and further improvements in administration have shown that the system may become self-supporting.

As the government owns and controls the mail system of the country, so, also, in the opinion of some, should it have the ownership and the control of the railroads.

Arguments for Government Ownership. — The reasons advanced in support of this opinion may be summarized as follows: —

1. To the state belongs the duty of providing not only for the public peace and the integrity of the laws of the country, but also for whatever may conduce to the common civil prosperity of the citizens. Now, transportation under conditions of freedom from excessive charges, discriminations, favoritism, and all the evils of the present system is surely conducive to such prosperity. Hence the desirability of government ownership.

2. The railroads should be considered public concerns rather than private concerns. They serve a public utility and need rather than a private. They have been largely subsidized by the government and are engaged in commerce that pertains to the vital welfare of the whole country. Hence the railroads should be owned and controlled by the government.

3. This fact is all the more emphasized in time of war, when the railroads become an essential means of offense and defense for the country.

4. The railroads under government ownership would cease to

be private concerns, and the difficulty of bringing about accord between their present dual characters as at once private and public concerns would be obviated.

5. The power of railroad managers for working evil and for showing favoritism to persons and localities would cease.

6. Uniform classification could be established over the whole country.

7. Discriminations and rebates would come to an end.

8. The immense revenues accruing from railway service, that now swell the fortunes of directors and stockholders, would revert to the public treasury and help to diminish the general burden of taxation.

9. Considerable sums of money would be saved through the abolition of an army of high-salaried officials, advertising methods, soliciting agents, and lobbyists.

These are some of the reasons that lead many to advocate government ownership of railroads.

Railroads in Foreign Countries. — The action of foreign governments in this matter has also had an influence in encouraging the idea. Nearly all foreign countries own their railway systems, many both own and manage them, and it is thought that what obtains satisfactorily in other lands might well be adopted in our own.

A brief review of the status of railroads in foreign countries will be of interest, and may the better enable us to form our opinion on the subject of government ownership and government management. The various combinations are as follows: —

1. Government ownership and government management	Belgium.
2. Government ownership and private management	Italy until recently.
3. Private ownership and government management	Part of Austria.
4. Mixed government and private ownership and management	France.

France. — The railway system of France is composed of six large divisions. There is one state line. The government contributed part of the capital to build the roads. After a

certain number of years (ninety-nine) the entire railway property reverts to the state. The government exercises strict control and supervision. In the construction of the roads, there was little waste of capital. Competition was suppressed. Freight rates are not excessive, and passenger rates are very low. The government guarantees the interest and the dividends on railroad bonds.

Belgium. — Government ownership is here best illustrated. Railway construction was begun in 1833 by the state. Private lines were also built. Competition set in, and proved to be uneconomic and wasteful. In 1870, the government began to buy up the private lines. Now the government owns and operates practically the entire railroad system of the country.

Italy. — Before 1868, there existed disconnected lines in each province. Competition and its evil results were rampant. After 1868, the lines were united. There were four great systems — Upper Italy, Rome, East Coast, Sicily and the South. There was little competition, and combinations were easily made.

After 1868, the government began to buy up the railroads. In 1875, the railroads in great part were owned and operated by the government. Government control proved unsuccessful. In 1885, the government, still owning the roads, gave up the operation to private companies. The service proved unsatisfactory and, since 1905, efforts have been made leading to state operation of the railways.

Germany. — State lines were built, 1848–1850, in Prussia. Private lines were also built. Competition was keen, the service poor, and the rates high.

In 1861, Bismarck came into power, and militarism ruled the country. In 1871 and thereafter, the railroads underwent a unifying process. In 1878, 3000 miles of railroad were owned and operated by the state; 2000 were owned by private companies and operated by the state; 6000 were owned and operated by private corporations. In 1881, 7000 were owned and operated by the government; 3000 by private companies. In 1885,

13,000 were owned and operated by the government in Prussia alone, 1000 by private companies. In 1900, there were 30,597 miles of railroad in the German Empire, and 93 per cent were owned and operated by the state.

A Code of Railway Regulations was issued by the government in 1886. Since 1875, there has been no competition. Pooling is allowed between railroads, canals, and waterways, in order to eliminate wasteful competition and unjust discriminations.

Austria-Hungary. — In 1906, 68 per cent of the total miles of railroad in Austria were operated by the state, and over 39 per cent were owned and operated by the state. In 1908 only 17 per cent of the total miles of railroad in Hungary were under private management. The state owned and operated 44 per cent, and operated the 39 per cent that remained under private ownership. In both countries all railroads, whether private or government-owned, are subject to the direct supervision and control of the ministry.

Russia. — The government owns and operates most of the railroads in European Russia. Private lines, before the war, were subsidized and thus controlled by the state.

Norway. — Since 1901 the railroads are owned and operated by the state.

Sweden. — In 1901 there were 7217 miles of railroad, 2392 miles of which were owned and operated by the state. Competition is prohibited.

Spain and Portugal. — There are private lines helped by the state.

Switzerland. — In 1897 a law was passed authorizing the purchase of all the railroads of the country. In 1909 the government owned and operated 65 per cent of the railroad mileage.

India has four classes of railroads: —

1. State-owned lines operated by companies.
2. State-owned lines operated by the state.
3. Lines constructed by guaranteed companies.
4. Lines constructed by assisted companies.

Mexico, *Australia* (since 1860), *Japan* (since 1906), have government ownership.

England, like the United States, has private ownership. (Cf. Logan G. McPherson, *Transportation in Europe.*)

Motives for Government Ownership in Foreign Countries. — The example of foreign countries, as was said before, encourages many in this country to agitate government ownership of railroads, as the only means of doing away with the present evils. It must be borne in mind, however, that foreign states have had other motives for acquiring possession of their railroads besides that of avoiding the abuses of railroads.

The state of uneasiness in which the nations of Europe exist through the fear of foreign invasion has led them to hold possession of a means that would prove of immense service to them in case of war. The power to mass troops along some threatened portion of the frontier at a moment's notice, to hasten reënforcements to any point in case of actual conflict, to furnish constant connection with bases of supplies which could be kept at safe distances from the invaders, to hurl masses of invading troops against the frontiers of an enemy, — this power appeals to nations situated so closely together within the confines of Europe, and leads them to adopt government ownership of the railroads.

Again, when the railroads in most foreign countries were started and had passed beyond the experimental stage, there was lacking the private enterprise necessary to carry out any elaborate system of construction. The various governments had to subsidize the roads, to contribute all or much of the capital needed to establish the lines. The policy of government ownership was thus forced upon the nations, and the policy once adopted became in most cases the accepted practice.

The avoidance, through government ownership, of the evils attendant on private ownership was a very subordinate consideration in foreign countries. The two preceding motives were predominant.

With the United States, the last motive would be the only one

that would have weight. Remotely situated as the United States is from foreign countries, there does not exist the same need of watchful guard over the frontiers as among the closely grouped countries of Europe.

Nor was there lacking sufficient capital from private sources to build the many miles of roads that now traverse the country. And were new roads needed to-day, there is no doubt that ample funds could be obtained without any appeal to government aid.

The motives, therefore, that influenced the foreign nations in the adoption of a government-ownership policy do not hold in the United States. (Cf. A. T. Hadley, *Railroad Transportation*, p. 238.)

Objections to Government Ownership. — On the other hand, the following may be given briefly as the objections to government ownership of railroads: —

1. The argument that to the state belongs the duty of owning the railroads because they are essential to the common civil prosperity of the citizens, is not conclusive. The state is not obliged to seek the common welfare of the citizens directly by actual personal administration of all the means conducive to the civic welfare. It amply fulfills its duty when it leaves the transportation problem in the hands of private citizens, encouraging them in their efforts and aiding them when necessary, solely reserving to itself the right of supervision and regulation in order to eliminate the abuses that may threaten the rights of the community.

2. Under government ownership inefficiency would replace the present remarkable degree of efficient management that is to be found among railroad officials. Many of the managers of the roads are men who have risen from the ranks, and have owed their promotion to the proof they have given of the possession of exceptional executive ability. These men would be replaced by others, who could not possess the same knowledge of details and the same practical ability.

Inefficient management would entail economic loss, and the

large returns at present earned by the railroads would cease, to the great injury of the public.

3. The returns from the railroads are subject to constant variation. The government could not rely on any certain income from the roads. The amount would vary at times ten or even one hundred millions of dollars. Failures of railroads would happen under government ownership as well as under private ownership. In the thirty years elapsing between 1876 and 1906, 676 roads were placed under receivership and 925 roads were sold under foreclosure. The total amount of stocks and bonds involved in both cases was over $13,562,000,000. The credit of the country would suffer were it to assume the responsibility and risk of conducting the railroad business on a paying basis.

4. The tariff changes have great influence on business throughout the country, causing hesitancy on the part of merchants to engage in extensive commercial transactions. In like manner, if the legislature could control railroads and their rates and change managers at its pleasure, great disorder would result in business. Stability and permanence of business conditions are essential to commercial prosperity.

5. There would be the danger of sectional favoritism. If railroad managers can to-day discriminate by classifications and rates against sections of the country, there is no reason why, under government ownership of railroads, a party in control of the government could not favor one section of country more than another, when there was opportunity of thereby gaining political support or of rewarding party adherence.

6. Government ownership of railroads would destroy personal initiative. The causes of the great advance of railroads in this country in the past have been the personal enthusiasm of managers, the desire of each management to surpass every other in better accommodations, in more perfect equipment, in greater value of railroad property. Much of all this would cease, were the government to possess and operate the roads.

7. Government ownership marks a tendency towards socialism and communism.

QUESTIONS

1. What are the evils of railroads?
2. Mention the remedies that exist against the evils of railroads.
3. Why are lawsuits and state commissions inefficient in this matter?
4. When was the Interstate Commerce Commission established? What is the purpose of the commission? Mention the laws that have given greater efficiency to the commission.
5. What are the reasons advanced for the adoption of government ownership of railroads?
6. What is the condition of railroads in foreign countries?
7. What were the motives for government ownership of railroads in foreign countries?
8. Give the main objections to government ownership of railroads.

CHAPTER XVII

CORPORATIONS. TRUSTS

I. Corporations

The tendency in business to-day is towards corporate organization. This tendency has become marked since 1887. Before that time, a few hundred millions of dollars represented the total capitalization of all industrial corporations. During the succeeding twenty years the capitalization of corporations represented by their securities reached the enormous sum of over twenty-five billions of dollars. (Cf. H. L. Wilgus, *A Study of the United States Steel Corporation in its Individual and Legal Aspects.*)

Methods of doing Business. — Industrial business is carried on to-day in the following ways: by individual enterprises; by firms of partners, or partnerships; by corporations; by trusts.

The report of the Census of 1910 shows the conditions of industrial enterprise. In that report it is shown that there were, in 1909, 268,491 manufacturing establishments. Of these, 140,605 were operated as individual plants; 54,265, as partnerships; and 69,501, as corporations. There were, besides, 4120 coöperative or miscellaneous concerns.

The largest amount of the total product was turned out by the corporations. Thus, the value of the products of the corporations was $16,341,000,000; that of partnerships, $2,184,000,000; that of individual plants, $2,042,000,000. The coöperative and miscellaneous concerns produced to the value of $104,000,000.

Establishment	Number	Average No. Wage Earners	Product-value
Individual	140,605	804,883	$2,042,000,000
Firm	54,265	794,836	2,184,000,000
Corporation	69,501	5,002,393	16,341,000,000
Other	4,120	12,934	104,000,000

(Department Commerce and Labor. Bulletin, 1910. Manufactures, U. S. Cf. Leroy-Beaulieu, *The United States in the Twentieth Century*, Part III, ch. 3.)

1. **Individual Establishment.** — In individual establishments the individual supplies the capital, and his property is liable for the debts of the concern.

2. **Partnership.** — A partnership is the association of two or more persons in one business. Each partner contributes something of value to the business in the form of money, labor, or skill, and is entitled to a part of the profits. Unlimited liability is assumed by the partners for all the debts of the business, and the acts of one partner bind all the copartners. The laws of many states provide for a limited partnership, in which a person contributes a certain amount of funds to the concern and is liable for its debts only to the amount of the funds contributed. Such persons are silent partners and take no active part in the management. A partnership is dissolved by agreement or by the withdrawal of one of the partners.

3. **Corporation.** — An industrial corporation usually takes the form of a joint-stock corporation. An industrial joint-stock corporation is an association of many persons, who, by buying shares, contribute their capital for some commercial enterprise, and receive a part of the profits of the enterprise in proportion to the number of shares they hold. The sums contributed by the organizers constitute the capital of the corporation. The shares have a fixed value, most frequently $100 a share, but they may be rated at any amount. The contributors of the capital become the shareholders or stockholders of the corporation.

Stocks are of two kinds: Preferred stock and Common stock. The stockholders are entitled to receive interest on the amount of capital they have invested. Interest is paid in the form of dividends. Dividends are first paid on the preferred stock and then if possible on the common stock. The dividends represent the profits of the business.

Preferred stock is Cumulative or Noncumulative: cumulative when the dividends, if not paid at all or in full at the time appointed, must be paid in full at some later declaration of dividends before any dividends are paid on the common stock; noncumulative when there is no such obligation to apply future earnings to pay back dividends not earned at the time.

A board of directors is chosen from among and by the stockholders of the corporation, each share representing one vote. From among the directors an executive board is chosen and officers appointed, and these become the active managers of the business. The stockholders assembled in general meeting supervise the actions and methods of the board and the officers.

The Corporation Charter. — At first, corporations were created by special charters issued by the legislative bodies of the several states. To-day each state has its corporation laws, which regulate the method of organization, and under these general laws corporations may be organized. Some of these laws apply particularly to certain kinds of corporations, such as banks, insurance companies, and railroads. A charter is secured under the laws of the state. The charter runs for a certain number of years and may be reissued.

4. **Trust.** — If several corporations, doing most of the business in some industry, combine under the control of a single board, the combination is called a trust, no matter what the form of organization may be. In most cases the trust is in form a large corporation; so that trusts have all the advantages and disadvantages of corporations in general, besides some special characteristics which are discussed in the last part of this chapter.

Advantages of Corporations. — Corporations have advantages not found in other kinds of organizations. They permit the

aggregation of a large amount of capital, and allow the undertaking of extensive operations not possible to smaller capital. They have a perpetual existence and are not dissolved by the retirement of individual stockholders. They possess many means of economizing and, by reducing the cost of production, can sell their product to the consumers at lower prices. They are able by paying large salaries to secure the most skilled managers and raise the standard of business efficiency. They permit even the smallest investors to partake in large extensive undertakings. Each stockholder assumes only a limited liability, determined by the number of shares he holds. The shareholder may retire from the enterprise at any time by the sale of his shares. The shareholder is usually able to know exactly the amount of risk he assumes upon buying shares in the company.

Objections to Corporations. — Notwithstanding the advantages corporations possess, the method of conducting corporate business to-day has given rise to much popular criticism. The objections most commonly brought against corporations may be summed up as follows: —

1. Corporations frequently come under the influence of one man or a clique of men who have secured possession or control of the major part of the stock. "Dummy" directors are set up by the financial interests that control the corporation, and such directors are wholly in the hands of the powers that have appointed them. The business is frequently run, not with the purpose of benefiting the shareholders, but to subserve some personal interest of those in control. Again, the directors are able, through their knowledge of the intimate affairs of their corporation, to deal in the buying and selling of shares for their own benefit, or they may, through the command they have of the large funds of the concern, make use of them for their own monetary advantage. Still another questionable means within the power of directors is to lease various functions of the company for a nominal consideration to tributary companies, in which the directors are financially interested. Recent governmental investigations of corporations in differ-

ent parts of the country will furnish plentiful examples of all these abuses.

2. The limitation of risk on the part of the directors promotes negligence and frequently dishonesty in commercial transactions. An individual or a partner of a firm, upon whom the whole financial responsibility in business ventures falls, will naturally be more careful in the conduct of business than one who bears but a proportionately small share of the loss attendant on failure or exposure.

3. Little sympathy can exist between the shareholders of a corporation and the employees. The shareholders are concerned only about the payment of their dividends. The managers are but the agents of the stockholders, and their main purpose is to please those who have placed them in office by increasing the dividends. This is done frequently by reducing cost of production through a decrease in the wages of the laborers. The cases were exceptional in the past, where corporations considered their employees otherwise than as mere machines, and where they studied the welfare of their laborers, except when forced to do so by legislative measures. "Soulless" corporations is a term well applied to many of the large business interests. (Cf. J. A. Hobson, *The Evolution of Modern Capitalism*, ch. VI.) A more equitable spirit, however, has been manifested in the last decade. There is a tendency to help the employees even beyond the legal requirements. In some large concerns various kinds of accommodations have been provided for the working men and women, pension funds have been instituted, and profit sharing has been introduced.

4. Corporations are sometimes formed for the purpose of fleecing credulous investors. A franchise which costs little or nothing is secured to carry on some business enterprise. A promoter goes about seeking for investors. Specious arguments are used by word of mouth or through elaborate advertisements, and there are always found vast numbers who are anxious to throw away money in foolish investments. Shares are bought by the unwary at a low opening price upon the assurance that

their value will rise in a short while. A great amount of capital is collected. The promoters receive their commission and retire from the concern. The corporation officials disappear with the funds collected, or transfer the business to some other concern, and the shareholders are left with worthless certificates in their hands, representing values in a corporation that existed only on paper.

5. Overcapitalization is often resorted to by corporations. "Stock watering" is the term commonly employed. It has been stated by bankers that most of the large industrial corporations "water" their stock, and give a wholly fictitious value figure to their advertised capital. It has been asserted on the floor of Congress that the capital of the railroads is half water.

The figure given as the capital of a company should naturally represent real value. If $500,000 is given as the capital, that $500,000 should represent the actual amount of money subscribed and paid in by the stockholders. Putting the par value of the shares at $100 a share, there should be 5000 shares distributed among the investors. The shareholders have actually given to the company $100 for each of the shares they hold. This capital will be expended, of course, as all capital is, in buying the plant, machinery, raw material, and in paying the current expenses of the business. The $500,000 represents the amount of money invested. If the business should bring in a net profit of, say, $50,000 a year, there would be a dividend of 10 per cent for the shareholders. Each shareholder should receive $10 for every share he holds. But if, while the actual capital is $500,000, the nominal capital given out is $1,000,000, the net profit of $50,000 would represent a dividend of only 5 per cent for the investing shareholders. The 5000 shares sold to investors would absorb $25,000 of the net profit. The other $25,000 of profit would pay dividends on stock given away to the promoters of the company.

Evidently the capital can be watered to such a figure that the net profit of the business will yield very small dividends to the

shareholders. Corporations do not care to have their dividends appear too large. Large dividends, representing as they do large profits, make the consumer and the wage earner wonder why some greater part of the large profits of the business should not find their way to them, in the shape of reduced prices of products and higher wages respectively.

That overcapitalization is injurious to the consumer will be apparent from the following example: —

A gas company may have a capital of $500,000.
5 per cent interest on the capital = $25,000
Operating expenses = 25,000
$50,000

There are 50,000 units for sale.

To cover operating expenses and gain 5 per cent interest, the 50,000 units must sell for $50,000, *i.e.* $1 a unit.

Hence, gas will be sold at $1 a thousand cubic feet.

Now, if the capital is nominally increased to $1,000,000
5 per cent interest on the capital = $50,000
Operating expenses = 25,000
$75,000

There are 50,000 units for sale.

To cover the operating expenses and gain 5 per cent interest, the 50,000 units must sell for $75,000, *i.e.* $1.50 a unit.

Hence, gas will be sold at $1.50 a thousand cubic feet.

There are many who hold that raising the figure of the capital beyond the actual amount of capital contributed is often justifiable and should not be characterized as stock watering. Certain immaterial things should be included in the actual value of a corporation. Thus, there are the earning power of the corporation, the value of the franchise, the good will, the monopoly control of a commodity or a service, the selling value of the securities which may be far above the par value. All these things, it is claimed, entitle a corporation to fix its capital figure in excess of the amount justified by mere tangible property.

6. Corporations have a tendency to drive small individual enterprises out of business. It is impossible in many kinds of business for a small firm to compete with a corporation. The

latter is able, because of the large capital at its command, to introduce high-priced machinery which would be beyond the means of smaller capital. The product turned out by the large company can be sold at a lower price than that of the smaller, because of the many economies possible to large-scale industry. The large industry, being able to secure a wide market, adopts the principle that there is more profit in many sales at a low price than in fewer sales at a high price. The smaller industry, not possessing the advantages of the larger, cannot reduce its prices, and the high-priced product of the smaller industry is driven from the market. Hence, many manufacturers who formerly conducted their own business have to-day become the paid employees of the large corporations. The tendency to concentration, however, is not felt in all industries. Certain industries, such as the iron and steel, agricultural machinery, electrical apparatus, cotton, glass, leather, food products, liquor, and shipbuilding industries, have come under the control of concentrated capital. (Cf. Leroy-Beaulieu, *The United States in the Twentieth Century*, Part III, ch. 2.)

II. Trusts

Definition and Explanation. — The trust is a form of concentration that has arisen in recent times. It is a combination of several corporations under one management. The securities of the corporations are bought up and the holders of such securities receive trust certificates in exchange. A promoter puts before two or more large corporations the advantages to be gained by combination. The corporations combine and are duly incorporated under the laws of a state. The charter having been obtained, the business of the trust may be transacted in any state of the Union.

Trusts have increased greatly in number during the past twenty years. In 1900 there were 185 trusts, embracing over 2000 distinct plants. In 1904 the number of trusts was over 790, not including railroads. The largest is probably the United

States Steel Corporation, organized in 1901, and combining ten large corporations, with a capitalization of over 1400 millions of dollars. The number of trusts has increased considerably in more recent years.

Trusts exist in Europe, but they have little resemblance to the trusts in the United States. In Germany, for example, each firm that enters a trust combination retains to a large extent its own autonomy. (Cf. *Staats Lexicon*, "Kartelle.") Competition is not destroyed. One of the important objects of the trust is to regulate the output of the industries, so as to prevent overproduction.

Motives for the Formation of Trusts. — In the United States, the primary motive that brings about the formation of a trust is undoubtedly the desire to eliminate competition. Competition amounts to a warfare between different establishments. It entails immense waste and expense. To eliminate it various means have been employed. Pools were formed, in which a common fund was established by several corporations. All the earnings of the corporations were turned into the common fund, and at the expiration of stated periods a distribution was made upon terms adopted by the members of the pool. Again, agreements were executed by which exclusive territory was apportioned to the different concerns, or by which a fixed scale of prices was to be maintained. Finally, "holding companies" were organized that bought up the majority of the stock in competing concerns and thus prevented competition. All these methods having been declared illegal, recourse was had to the trust. (Cf. G. H. Montague, *Trusts of To-day*.)

A trust that embraces a number of large corporations effectively abolishes competition between them. If the combination secures a monopoly of the industry, as through the absorption of the sources of supply or the acquisition of patent rights, it becomes complete master of the industry. In cases where a monopoly is not possible, the means adopted to destroy the competition of others in the industry are frequently unscrupulous. The trust seeks to absorb all its competitors, whether individual

firms or incorporated companies. It buys them up when possible, and the price paid is determined not so much by the value of the business bought, as by the cost the trust would be put to in order to destroy the opponent by competition. A powerful rival that could wage a protracted war against the trust will command a high price. (Cf. J. A. Hobson, *The Evolution of Modern Capitalism*, ch. VI, p. 144.) If the opponent refuses to sell out to the trust, a merciless warfare is waged against it. The almost unlimited means at its control gives the trust immense power. By underselling and by agreements with transportation companies, it can ultimately force the opponents to submit, when the only alternative for them is to go out of business.

A second motive for trust combination is the power to control the price of the commodity produced. A trust may arbitrarily fix the price of its product if it secures a monopoly of the business. In any case, if a trust can gain control of the major part of the supply of a product, it can in great measure determine the amount of the supply, and thus manipulate to its own advantage that fundamental law of supply and demand which regulates the prices of commodities. Where a trust combines several corporations, it controls the output of them all. It can close down the major part of the plants, or can decide the amount of product each may produce. A trust may thus control the supply and so control the price of the product. (Cf. J. A. Hobson, *The Evolution of Modern Capitalism*, ch. VI, p. 3.)

A third motive that prompts the formation of trusts is the economy that results from large-scale business. Economy will result from a number of sources, such as the reduction of office rent and of salaries, the curtailing of the great army of traveling agents, the cheaper buying of raw material because bought in large quantities, the construction by the trust of its own transportation lines on land and on water, the acquisition of the sources of supply, the withdrawal of competition altogether when a monopoly is secured through combination and the lessening of the expense of competition when there is no monopoly, the saving

of transportation charges through ability to ship goods from points near the destination, the power to use waste and to turn out by-products, the lessening of expensive advertising, the saving of wages when several of the smaller concerns are closed altogether or operated on part time.

This power of economizing is the great economic benefit conferred by trusts on modern industrial methods. It has brought about a greater efficiency of production. That the trusts are popularly condemned in spite of the widespread economies they have introduced, is due to the fact that many will be injured through the operation of these economical methods. Smaller establishments find difficulty in continuing alongside of the great trusts, individuals are driven out of business, many traveling salesmen lose their occupation, labor is affected by the cessation of operations in many plants and the reduction of operations in others. Such evils, very real to those affected by them, might be regarded as the necessary results of industrial development. The introduction of machinery produced similar results in the past. A more just cause for popular condemnation of trusts exists in the fact that these economies are effected often by iniquitous methods, and that the savings made by the trusts through their economies find their way into the pockets of the few and are not widely distributed among the members of society.

The Trust Problem. — Corporate organizations that unite many men and vast sums of capital, in order to carry on large-scale productive industries, furnish one of the most serious problems of our times. The trusts that link together in one interest a great number of individual corporations, and that seek to absorb all the corporations and the smaller firms engaged in the same or related industries, have especially come to be regarded as a menace to the welfare of society. The rapid growth of corporations and trusts within the past twenty-five years is viewed with apprehension by people and governments alike.

That there are many evils in corporate organizations, affecting many classes of society, the consumers, the laborers, and the smaller industrial enterprises, cannot be denied. That they bring

with them many advantages must also be admitted. Hence they have their adherents as well as their opponents. And, as happens in the case of all public questions, there are extremists on both sides. There are those who consider the trusts as unmitigated evils, which must be destroyed. Corporations are blamed for all the present evils of society. The formation of a trust has been branded as a crime, and laws have been passed inflicting severe penalties on those who organize them. (Cf. G. H. Montague, *Trusts of To-day*, ch. V.) There are others who believe that corporations are but the result of economic development, bringing many advantages to society, and that they should be left free to develop to their utmost, untrammeled save by the laws that determine and control the march of all industrial advances.

Finally, there are many who take a midway course with regard to these great corporations of industry, and, while holding that they should be allowed the widest scope for organization, yet insist on the need of a prudent but strong regulation by governmental authority. These combinations, they argue, are the outgrowth of the industrial conditions of the present age; they have come to stay, and they will stay in one form or another, in spite of all efforts to destroy them. Moreover, it is pointed out, they add to the industrial efficiency of the nation and have it within their power to confer lasting economic advantages far beyond any contributed by smaller concerns under a system of unrestricted competition.

Corporations are not in themselves an evil. The right of uniting with one's fellows for the purpose of attaining a common and lawful end by all just and legal means flows from the natural law. (Cf. *Rerum Novarum.*) The right to unite ceases to exist only when the end intended by an association or the means employed are opposed to the moral order, or when the existence of such association is opposed to the common good of the social body. When, therefore, a corporation or a trust is formed for perfectly legitimate ends and makes use of means that, on the one hand, oppose in no way the common social good, and that,

on the other hand, are capable of increasing the common welfare of society, the right of such corporation or trust to organize and to exist should not be interfered with. But if the corporation or trust is instituted for an iniquitous end or employs means opposed to the rights of others or such as are capable of destroying the common welfare, the government, whose foremost duty is to protect society, must step in to prohibit such an organization or to regulate its methods.

It will scarcely be denied that the large combinations as managed to-day need regulation because of the arbitrary methods employed and the menace they have become to industry. The question is what form that regulation shall take.

Remedies for the Evils of Trusts. — (1) *State Laws.* — There already exist state laws passed by nearly all the states prohibiting monopoly, restraint of trade, the fixing of prices, the curtailing of output, and other practices. Some states forbid all kinds of combinations that have a restraining effect on trade, whether that restraint is reasonable or unreasonable. (Cf. G. H. Montague, *Trusts of To-day*, ch. V.)

There is, however, great lack of uniformity in the laws of the several states; there is, too, lack of uniformity in the attitude of the different states towards trusts. Some states seek to oppress them by stringent laws; others invite them within their borders by the offer of legal facilities in regard to organization and regulation. Some states, like Delaware and West Virginia, have no antitrust laws. The federal Constitution allows interstate trading to any corporation legally established in one state. A corporation cannot be dissolved except by suit brought in the state under whose laws it has been incorporated and for acts in violation of the laws of that state. The consequence of all this is obvious. If one state finds it to its advantage to allow the easy organization of trusts, the stringent laws of all other states become of little avail. States may legislate only for intrastate trade, and the constitutionality of much of the state legislation affecting corporations chartered in other states has been in certain cases called in question. (Cf. J. B. Dill, "National Control

of Corporations," in *Encyclopedia Americana;* G. H. Montague, *Trusts of To-day*, ch. V; F. J. Stimson, *The American Constitution*, ch. VIII.)

(2) *Sherman Antitrust Law.* — On July 2, 1890, Congress passed " an act to protect trade and commerce against unlawful restraints and monopolies." It is known as the Sherman Antitrust Law. It declared illegal " every contract, combination in the form of trust or otherwise, or conspiracy, in restraint of trade or commerce among the several states, or with foreign nations." It declared that

" Every person who shall monopolize, or attempt to monopolize, or combine or conspire with any other person or persons, to monopolize any part of the trade or commerce among the several states, or with foreign nations, shall be deemed guilty of a misdemeanor."

The penalty for acts contrary to the law is a fine not exceeding $5000, or imprisonment not exceeding one year, or both. The word " person " or " persons " used in the act " shall be deemed to include corporations and associations existing under or authorized by the laws of either the United States, . . . the laws of any state or the laws of any foreign country."

Various objections were brought against the act. The constitutionality of the law was called in question, but it was passed on and upheld by the United States Supreme Court in 1898. It was claimed that the act was too indefinite, that it related as much to individual business concerns as to trusts, that it left open to doubt the meaning of interstate commerce, that it prevented all kinds of combinations between manufacturers, since all combinations must be a restraint of trade, that it prevented combinations that were admittedly advantageous to industry, and, finally, that it left manufacturers at a loss to know what they could and what they could not do legally under the act.

Through a recent (1911) decision of the United States Supreme Court some light was thrown on the matter. The court decided that the act referred only to " unreasonable " restraint of trade. Combinations, therefore, against which unreasonable intent to

restrain trade could not be proved should not be molested under the law.

Objections to the law even with the new interpretation are not wanting. It is declared that the interpretation of the court is new legislation (cf. Justice Harlan's dissenting opinion in the Tobacco Trust case, June, 1911), that it unwarrantably lies wholly in the power of the judicial body to declare when " unreasonable " restraint of trade is practiced or contemplated, that " the final settlement of industrial questions is in the hands of judges who know very little about industrial questions, and who have no special preparation for dealing with them " (H. S. Smalley, " Trust Regulation and the Courts," in *Journal of Political Economy*, April, 1912), that manufacturers are still at sea as to what may constitute unreasonable restraint.

In spite of the objections against the law, its upholders declare that it furnishes an adequate weapon in the hands of the government to cope with the present evils. Efforts made to amend the act have had no result. In 1903, legislation strengthened the law by appropriating $500,000 for the purpose of enforcing its provisions, by giving to the Attorney-General the power to employ special counsel to conduct suits under the act, and by providing for the appointment of special assistants to the Attorney-General and of an Assistant Attorney-General to aid in enforcing the law. During the years 1905–1911, nearly fifty prosecutions were instituted against trusts and combinations under the Sherman law. Several large concerns, such as the Standard Oil Company, the American Tobacco Company, the Du Pont de Nemours Company (powder trust), and the Standard Sanitary Manufacturing Company (bathtub trust), were dissolved.

(3) *Clayton Trust Bill.* — This bill became a law Oct. 15, 1914. Its purpose is to supplement the Sherman law and other anti-trust measures. In general, the law denounces and makes unlawful certain trade practices with the purpose of arresting the creation of trusts, conspiracies, and monopolies, such as discrimination in prices with intent to prevent competition; exclusive and tying contracts; holding companies, and interlocking

directorates. Illegal acts of corporations are to be deemed the acts of individual directors and officers of the corporations, who thus become subject to the penalties imposed. Labor and other associations are exempt from the operation of the antitrust laws.

(4) *Federal Control of Trusts.* — The alleged inefficiency of antitrust laws has led to the suggestion of other remedies. The remedy most prominently suggested is federal control of all interstate commerce. That Congress has power under the Constitution to exercise such control is claimed in virtue of Clause 3, Section 8, Article I of the Constitution, which says: "The Congress shall have power to regulate commerce with foreign nations, and among the several states, and with the Indian tribes." (Cf. Hon. P. S. Grosscup, "The Government's Relation to Corporate Construction and Management," in *Annals of the American Academy of Political and Social Science*, July, 1908, p. 25.)

Others hold, and they are sustained by a Supreme Court decision (a decision affecting the sugar trust), that this clause of the Constitution does not refer to manufacturing establishments. (Cf. F. J. Stimson, *The American Constitution*, ch. VIII.) An amendment to the Constitution would have to be passed, in order to bring the business of manufacturing concerns within the control of the federal government. Should that come about, all corporations of whatever kind doing an interstate business could be compelled to receive their charters from the federal government. They would thus be brought under the control and regulation of the government in regard to their organization and methods of conducting business, and become liable to a withdrawal of their charters in case of illegal practices.

That adequate federal control of corporations can be secured under existing and possible legislation without the elaborate means of a constitutional amendment, is the opinion of many. And, indeed, the federal government has taken active means to arrive at a solution of the trust problem. In 1903, a Bureau of Corporations was established in connection with the Department of Commerce and Labor. The Bureau had power to

investigate all industrial corporations engaged in interstate or foreign commerce, and to institute suits through the Attorney-General against violators of the law. Twelve years after its establishment the Bureau was superseded by the Federal Trade Commission.

On Aug. 23, 1912, Congress established a Commission on Industrial Relations consisting of nine members appointed by the President. The Commission was empowered to investigate the general condition of labor in the principal industries of the United States, especially in industries carried on in corporate forms, and to endeavor to find out the underlying causes of dissatisfaction in the industrial situation. The Commission presented to Congress a report of its findings on Aug. 23, 1915, after which it expired. (See Report.)

(5) *Federal Trade Commission.* — Another remedy long suggested against the evils often attendant on organized capital was the institution of a Trade Commission, with power to control all interstate trading. Such a Commission was established by Congress on Sept. 26, 1914, and is known as the Federal Trade Commission. It consists of five members appointed by the President. In the act establishing the Commission, unfair methods of competition in commerce are declared unlawful, and the Commission is empowered to prevent persons, partnerships, or corporations (except banks and common carriers) from using unfair methods of competition in commerce. The Commission may investigate any industry where unfair methods are suspected or complained of, and upon finding the existence of such unfair methods may order the managers of the industry to cease such methods. If the order is not obeyed, the case is brought before the United States Circuit Court of Appeals, which thereupon assumes jurisdiction over the matter. The findings of the Commission, if supported by testimony, are conclusive.

The Commission may impose severe penalties upon those who refuse to obey its summons, or to testify, or to produce documentary evidence when able.

The Federal Trade Commission was enabled to take up its

duties on March 16, 1915, when the first commissioners appointed by the President took the oath of office.

Whatever may be the results of the measures thus far taken, the trust problem still remains unsettled. Regulation, however, and not destruction of the great industrial combinations would seem to be the wiser policy. Within the past quarter of a century, a radical change has come over the industrial world. These are days of immense undertakings, and large aggregations of capital are needed to carry them to success. Combinations with all their undoubted economic advantages should be encouraged by the government, and yet they should be so regulated that the evils that may follow upon great power and great wealth may be wholly abolished.

QUESTIONS

1. What are the different methods of doing business?
2. How is capital obtained and where is the liability in individual establishments? In partnerships?
3. What is an industrial joint-stock corporation? Explain the different kinds of stock issued by corporations. How is the corporation charter secured?
4. What are the advantages of corporations?
5. Explain the principal objections to corporations. What is stock watering? Illustrate by an example how stock watering injures consumers.
6. What is a trust? How is it organized?
7. What are the motives for the formation of trusts? What were the various means employed to eliminate competition? What methods are frequently employed by trusts to eliminate competition?
8. How can a corporation fix the prices of its products?
9. How can a trust economize?
10. What is the trust problem? Are corporations in themselves an evil?
11. What remedies exist against the wrongs practiced by corporations? Why are state laws inefficient? What are the objections brought against the Sherman Antitrust Law?
12. What are the main features of the Clayton Trust Bill?
13. What is the Federal Trade Commission?

CHAPTER XVIII

GOVERNMENT REVENUE. TAXATION. PUBLIC DEBTS

I. Sources of Revenue

The body politic, or state, requires considerable resources for its existence and prosperous development, the promotion of its public well-being, the constant and effectual guardianship of justice, the preservation of peace and safety at home, and the maintenance of dignity and independence abroad.

In the beginning, when the social organization was in its primitive stage, the matter of collecting funds for the support of the government was comparatively easy. But as nations grew in size and embraced hundreds of thousands of subjects, the problem of collecting government revenues became a very serious and a very difficult one, and still continues to be so, after years of thought and experiment.

The sources from which the state realizes the funds necessary to its existence and well-being may be classed under three heads: (1) Public Domains and Public Businesses; (2) Fines, Fees, and Assessments; (3) Taxes.

Public Domains and Public Businesses. — The government may own and keep in its possession vast tracts of land within its own confines or in its foreign dependencies, and may thence derive a part of its revenue.

The United States possesses great tracts of land in the West, containing immense stores of wealth in timber, pasture, and minerals. The public domain of the United States includes the following divisions of land: —

(1) Purely agricultural lands;

(2) Desert lands;

(3) Irrigable lands;
(4) Precious metal and mineral lands;
(5) Coal lands;
(6) Timber lands;
(7) Stone lands.

In 1918 (June 30), the total acreage of the United States, including all possessions, was 2,395,804,160 acres. Unappropriated lands amounted to 573,869,589 acres. The estimated area in existing national forests was 175,951,266 acres.

Much of the public domain has been donated by the United States government for various purposes. Thus, from 1850 to 1918 (June 30), the land granted by the United States for wagon roads and railroads amounted to 126,934,149 acres; and for educational and related purposes, to 133,426,478 acres. (Report Commissioner General Land Office, 1918.)

Lively interest centers at the present time in the government holdings, and it is the effort of the government to keep such lands from the greed and exploitation of private capitalistic monopolies.

From such public lands revenue can be derived by the government, either immediately, by turning them into government monopolies and operating them directly and securing the profits arising from the product; or mediately, by conceding to private individuals or corporations the right, under certain conditions and limitations, of exploiting the wealth of the lands. Again, the government can sell such lands outright to private owners. The aggregate cash receipts of the United States government from the disposal of public and Indian lands from May 20, 1785, to June 30, 1918, was $491,430,102.

Belgium draws great revenues from its rich and extensive African possessions. North Carolina pays 25 per cent of its state expenses from the royalty upon the phosphate rock taken each year from its phosphate deposits. Canada receives large sums in royalties upon the gold mined in Canada. (N. M. Taylor, *Elements of Taxation.*)

Again, government ownership of such public utilities as rail-

roads, telegraph and telephone service, the mail system, tobacco and liquor traffic may become a source of government revenue. In some countries where the government owns and controls such businesses, the purpose of such ownership and control is chiefly to regulate the businesses and to prevent the abuses that might arise under private ownership, but in many instances large revenues are derived from this source.

Belgium and other countries of Europe manage to draw large revenues from the government railroads. Illinois gets annually from the Illinois Central Railroad 7 per cent of the railroad's gross receipts. This is by reason of a contract in the special charter given the railroad by the state. The amount received is nearly a million dollars a year and is 20 per cent of the state's annual revenues. Georgia receives about $300,000 a year from the rental of the Atlantic and West Point Railroad. (N. M. Taylor, *Ib.*)

The United States government owns and controls the mail system, but, as hitherto managed, it has been conducted with a view to giving the most efficient service at a minimum cost to the users, without gaining any surplus revenue from it. Indeed, ordinarily, a yearly deficit has had to be made up out of the general taxes.

Italy, Spain, and France have monopolies of the tobacco business and increase the public funds through that means. Switzerland has a salt monopoly. South Carolina has a monopoly of the liquor business, but it is managed principally for the purpose of regulating the traffic. Many city governments have monopolies controlling the supply of gas, of water, of electric lighting, etc.

One advantage derived from this source of government revenue is that there is no reduction of the incomes of the citizens, and the greater the increase of revenue from this source, the lighter is the burden of personal taxation.

Fines. — Considerable revenue is derived from the system of fines imposed in criminal suits.

Fees. — Fees are the charges collected by certain government

officials for services rendered. They are in use in most countries and furnish a large revenue.

In the United States, the federal and state governments exact fees for various services. Thus, there are inspection fees; license fees; incorporation fees imposed on banks, insurance companies, and other corporations; examination fees, for those wishing licenses as physicians, druggists, dentists, teachers, pilots, and attorneys; patent and copyright fees; custom-house fees; land-office fees; consular fees; and court fees of various kinds. (Cf. Th. K. Urdahl, *The Fee System in the United States.*)

The fee system, wherever carried out, opens a wide door to corruption, and in some cases imposes a severe burden upon the community. The compensation obtained by certain officials in city, county, and town in several states is made up wholly or in part of the fees collected by such officials in the administration of their offices. The amounts received by them, in some cases, have reached an exorbitant figure.

Large fees required for legal and court services are especially to be deprecated, because they frequently deter the poor from seeking redress against injustice.

A remedy suggested in the matter is that the compensation of all officials should be a fixed salary, and that all fees received by such officials should be turned into the public treasury and accounted for. Where a mixed system of salary and fee is permitted, and a portion of the fees collected is allowed an official, the percentage he receives should be fixed. All fees should be turned into the treasury, and from the sum thus turned in, the official should receive his share.

The advantage claimed for the fee system is that it is productive of greater efficiency on the part of the officials who depend on fees for their compensation. In the investigation of the Indiana State Fee and Salary Commission, in 1900, it was shown that when certain officials were paid by the fees they received, they executed their functions with great energy, and a large sum was obtained in fees. This all went into the pockets of the offi-

cials. When the fee system was replaced by a fixed salary, the fees were collected up to an amount sufficient to make up the salary, and after that, little interest was taken in the collection of the fees. As a result, the sum of the fees collected was much less than it had been.

The evils of the fee system, however, are so great that the necessity of reform in the matter has appealed to many governments, and measures have been taken in that direction. (Cf. Report of the Indiana State Fee and Salary Commission, 1900; Report of the Ontario Commission on the Election and Mode of Payment of Certain Prominent Officials, 1895.)

Assessments. — These are demands made by local governments upon property owners to help defray the expenses of certain improvements. The levy is made proportional to the amount of property owned or the degree of benefit derived by the property owner from the improvement.

Such are assessments for the building of streets and sewers. Assessments often fall on the poor, in the form of the higher rents which they have to pay.

Taxes. — A tax is a part of the wealth of the citizens appropriated by the government for public expenses. The object of taxation is to defray the expenses of the government. The sources already mentioned would not usually be sufficient to meet these expenses, except perhaps in the case of some small municipality or county. The government must have recourse to enforced contributions from the citizens, and to-day taxation supplies the greater portion of the government revenues.

Through its revenues collected from the various sources just mentioned, the government is enabled to carry on its varied functions in procuring the means conducive to social order and security, and in affording the individual members of society the opportunity for the development of all their activities. In treating the subject of taxation, we shall define the basis upon which the right of taxation rests, enumerate the different kinds of taxes generally adopted, describe the incidence and the shifting of taxes, and, finally, give the general principles of taxation.

II. Taxation

Right of the State to Tax. — That the state or nation has the right to procure revenue by taxation, when this is done in form of law, is unquestionable.

The right to tax does not rest on the principle, set forth by some writers, that the state has the right of eminent domain over all the property possessed by its individual members, and hence may claim a certain proportion of their wealth; nor does it rest on the principle advocated by others, that an implied contract exists between the state and its members, the citizens, whereby the state may demand from its several citizens a monetary return for the protection which it gives them.

The right to tax flows from the very nature and end of the state. The state, or social body, is an institution founded in the nature of man and intended by the Creator of man's nature. It has received from nature, through the will and intention of nature's Creator, all the rights needful to the attainment of its end. It possesses, therefore, the right to exact from its members that proportion of their wealth which may be necessary for the fulfillment of its aims.

The purpose of the right to taxation possessed by the state determines also the limits of that right. The state cannot exact an amount of taxes beyond what will be sufficient to enable it to perform its several duties. The right to tax is not a limitless right. (Cf. Cathrein, *Moralphilosophie*, II, p. 626.)

Taxes will be just when imposed by legitimate authority and when imposed for just causes.

Kinds of Taxes. — Taxes are Direct and Indirect.

Usually, taxes are divided into direct and indirect taxes with reference to the possibility of the shifting of the tax. Thus, a direct tax is one that is paid directly by the person upon whom it is levied. An indirect tax is one that, though nominally levied upon one person, is really paid by others to whom the tax is shifted. In this sense, a poll tax is a direct tax, because the tax comes out of the actual possessions of the person taxed. Cus-

toms duties are indirect taxes, because the amount of the tax paid by the importer is paid back to him by the consumer in the higher prices caused by the customs duties. The consumer actually pays the tax.

Since nearly all taxes may be shifted to another by the person upon whom the tax is originally laid, a better division of taxes seems to be that adopted by certain writers, viz., a direct tax is one that is levied upon persons or property; an indirect tax is one that is levied upon various objects of use and consumption. Examples will make the distinction clear.

According to this interpretation, direct taxes will embrace: —

1. Personal tax — poll tax.
2. Property taxes — on personal property; on real estate.
3. Mixed taxes — occupation tax.
4. Income tax.
5. Inheritance tax.
6. Corporation tax.

Indirect taxes will include: —

1. Internal revenue taxes.
2. Export duties.
3. Import duties.
4. Stamp taxes on papers.

Direct Taxes. — (1) *Poll Tax.* — The poll tax is a tax of a certain amount on each member of a community. It is not levied at all in some states; in others it is levied only on persons of voting age.

(2) *Property Tax.* — The property tax is a tax levied upon the property, personal or real, existing in the community or possessed by members of the community. It excels in simplicity. A man's possessions are estimated at their market value, and a certain percentage of that value is collected as a tax. The tax is in great measure certain and it is equitable, because it reaches those who have the means to pay.

This kind of tax, however, is not easy to collect. In past times, when property consisted almost wholly of real estate, little difficulty was encountered in the collection of such taxes. The amount of the real property was easily ascertainable. But when people stored their wealth under the form of personal property,

money, bonds, notes, bank accounts, credits, mortgages, checks, drafts, etc., it became a most difficult task for the taxgatherers to find out the real wealth of the owners.

Three methods lie open to the government to arrive at a knowledge of the taxable property of the owners.

One method is an inquisitorial search of the evidences of possession of property, made by government officials. This was much practiced in former times, when personal belongings were taxed and search had to be made to reveal their existence. Persons and private property were subjected to many vexations and abuses. The practice has been discarded.

In the second method of determining the amount of taxable property, the owners are allowed to declare the amount of property they possess. Sometimes an oath is administered to the declarants, and penalties are imposed on those who are found to have attempted fraud. This method opens the way to much fraud and deceit on the part of owners of taxable property, who are tempted to make use of every means to conceal their ownership. It puts a premium on deception, and places the greater part of the burden of taxation on those who are upright and conscientious enough to declare the full amount of their possessions.

In the third method, the government officials estimate broadly the amount and the value of the property owned, and their estimate stands unless the owner proves (by his oath or otherwise) that the valuation is excessive. This method is open to the same abuses as the second method described above; besides, the officials fail to take any notice of large amounts of personal property really liable to taxation.

Because of the difficulty of collection, many would advocate the exemption of personal property from taxation. Such taxation, however, although generally ineffective in this country through inadequate tax laws or the neglect of officials to enforce the laws, is the source of considerable revenue.

(3) *Occupation Tax.* — Taxes on occupations are, in the United States, limited to a small number, and they are imposed more with a view to regulate such occupations and prevent

violations of the law than with the intention of acquiring revenue. Special taxes, however, upon occupations of various kinds are frequently imposed, and are the means of bringing to the state considerable revenues. Many such taxes rendered necessary by the loss of revenue from other sources have been imposed in recent years.

(4) *Income Tax.* — An income tax is one that is levied on incomes. The income taxed is net income. In all cases of personal income tax a certain amount of income is exempt. In some cases the tax is a progressive tax, the rate of taxation increasing with the sum total of the income. Such is the income tax in New Zealand, Switzerland, and the United States.

In taxing incomes, account should be taken of the fact whether the income is a permanent or a temporary one. A permanent income is one that endures indefinitely and arises from a fixed and permanent source, for example, the income from a landed estate. A temporary income is one that terminates after a certain period, as ten or twenty years, as, for example, an income in the form of salary, or the proceeds of an annuity.

It would be unjust to place the same rate of taxation upon temporary as upon permanent incomes. He who receives a temporary income must out of that income provide for the future of his family or for his old age, when he shall have ceased to earn the income. He who receives a permanent income has no such need. The rate will, therefore, fall more heavily upon the temporary than upon the permanent income, and in proportion as it falls more heavily, so is injustice done.

Income taxes present considerable difficulty in collection and open the way to much fraud and dishonesty.

Income taxes exist in many foreign countries — England, Switzerland, Denmark, Prussia, Austria, Italy, Australia, India. They exist in several states in this country. In England, the income tax was at first adopted as a temporary measure. When in sore stress for money, Pitt, in 1798, imposed the income tax. It has since become a permanent method of taxation in England.

In the United States, a federal income tax law was enacted

Aug. 5, 1861. It was repealed in 1872. In 1894, an income tax law was passed, but it was declared unconstitutional by the Supreme Court. A constitutional amendment permitting the levy of an income tax "without apportionment among the several states and without regard to any census or enumeration," was ratified by the required number of states, on Feb. 3, 1913.

Since that time, the federal income tax has become a recognized method of raising revenue. The tax as levied by the federal government affects "every citizen of the United States, whether residing at home or abroad, and every person residing in the United States, though not a citizen thereof." The tax reaches the incomes of every one whatever the source of the income, whether from property owned, or business, trade, or profession, if carried on in the United States. A certain percentage of the income constitutes the normal tax. An additional graduated tax is imposed as a surtax upon incomes in excess of a definite amount. The surtax affects materially persons with very large incomes.

The income tax is a source of considerable revenue to the state, and many claim that the surtax especially is beneficial because it reaches the excessive incomes of the very wealthy, distributes the burden of taxation among those who benefit most from social conditions, and affects those who are best able to contribute out of their surplus wealth to the support of the state. The income tax may, however, if excessive, prove disastrous to business. Much of the income received by men engaged in business is reinvested in business, and helps in the increase of production. When the income tax, especially the surtax feature of it, absorbs a large percentage of the income, wealth that could be used as capital in the promotion of industry is lessened, and production is hindered. Capital may be driven out of taxable industries into non-taxable securities, inducing unemployment, raised prices, and higher cost of living.

(5) *Inheritance Tax.* — An inheritance tax is a tax "imposed upon the right to inherit property under the law or to receive it under a will." (N. M. Taylor, *Elements of Taxation.*)

This tax is easily collected, as it is not difficult to learn the amount of property left by the deceased, and it arouses little opposition on the part of the heirs. The only way to defeat it is by a gift made before death. The tax is a source of considerable revenue.

England has a progressive inheritance tax. In the United States a progressive inheritance tax was imposed on Sept. 8, 1916, and amended on later dates. Many of our states have laws providing for inheritance taxes.

(6) *Corporation Tax.* — Several states have corporation taxes. It is the practice in such states to estimate the value of the property of the corporation and its franchises, if any are possessed by it, and to fix the tax rate at a proportional figure.

The federal income tax law affects the incomes of all corporations organized in the United States, or organized by laws of foreign countries and receiving income from business transacted or capital invested in the United States. The tax is a definite percentage of the net income. Deductions are allowed for expenses for maintenance and operation, losses, depreciation, interest on indebtedness, and taxes. Beneficiary, labor, charitable, religious, and educational corporations are exempt from the tax.

Indirect Taxes. — (1) *Internal Revenue Taxes.* — Internal revenue taxes are taxes imposed on the products of a country. These taxes are paid immediately by the producers to the government, but ultimately by the consumers, to whom the producers shift the tax by raising the prices of the articles.

The revenue derived from this source may be very great, as the taxes may be widely distributed over a vast number of articles, and may be so moderate that they may prove an insensible burden to the people.

In such a form of taxation, however, it is difficult to maintain any just proportion of equality of taxation. To preserve equality and to collect the greatest amount of revenue, those commodities might be taxed which are used practically by all the people, and which are of daily need to all the people. Such would

be the necessaries of life. But in that case the greatest burden would be felt by the poor and those in moderate circumstances. The poor and the rich absorb practically equal portions of the necessaries of life, but whereas the wealthy would experience little difficulty in meeting the charges, the poor would find the burden most oppressive.

Hence, when this source of revenue must be resorted to, it is more equitable to exempt from taxation as far as possible the necessaries of life, and to restrict the taxes to such articles as constitute the luxuries of life or such as may demand the restrictive regulation of the government.

In the United States Internal Revenue taxes are limited to a few articles, such as need government regulation because of the menace they may be to the moral or physical well-being of society. Considerable revenue is collected from this source.

The articles taxed are distilled spirits, fermented liquors, tobacco, oleomargarine, adulterated and renovated butter, filled cheese, opium, mixed flour, playing cards.

(2) *Export Duties.* — Export duties are taxes upon commodities leaving the country. Such taxes are rarely imposed. In the United States they are forbidden by the Constitution.

(3) *Import Duties.* — Import duties are taxes levied upon articles entering the country. This method of taxation is frequently resorted to.

It offers the advantage of simplicity and promptness of collection. The tax is paid by the importers immediately upon the entrance of the articles into the country. As in the case of internal revenue taxes upon commodities, here too the taxes imposed upon commodities fall ultimately upon the consumers of the commodities, who pay them in the raised prices.

Again, as in the preceding case, the duties on imports that constitute the necessaries of life should not be excessive. That would be putting an unjust burden upon the poor, who would have to pay the increased prices demanded for such necessaries. The cost of living would be raised. It may be that in time, owing to popular demand, a rise in wages would be brought about

to meet the higher cost of living among the laboring poor. In that case the original tax would be shifted in part at least to the employing class, who would pay the increased wages. This, again, would be partial taxation and in so far unjust.

Moreover, the effect would be that a certain amount of capital would be taken out of production and there would result a diminution in the wealth of the country. For the increase of wages would seriously affect many producers, and would drive out of business that numerous class of producers who were barely covering expenses when wages, an important item in the cost of production, were at the previous low rate.

It is contended by some writers that taxes should be levied on the manufactured articles rather than on the raw material that enters into the articles. The article, in passing from the raw to the finished state, has frequently to go through many processes and through the hands of many sellers. Each seller will charge the tax plus his own profit on the commodity, and when the commodity reaches the ultimate consumer, it bears the burden of the tax together with all the intermediate profits. Gladstone, in 1880, sought to abolish the tax on malt and to substitute in its stead a tax on beer.

Customs duties in general have this evil effect, that they restrict the import trade and thus reduce the source of revenue of the government. This is especially the case when the tariff duties are so high that they become prohibitive.

(4) *Stamp Taxes on Papers.* — Stamp taxes are imposed in times of special urgency on bank checks, telegrams, transfers of stocks and bonds, bills of exchange, etc. Taxes of this kind were imposed in the United States during our late wars.

These taxes are easy of collection and yield a large revenue. They are paid by the persons using the various kinds of paper in the form of stamps affixed to the documents.

Incidence and Shifting of Taxes. — To determine the incidence of taxation is to determine the person who really pays the tax. Taxes do not always fall on the persons apparently affected by the levy. They may at times be transferred. This

transference of a tax from one person to another is called the shifting of the tax.

The mobility of a tax and its power to shift from one person to another, from one class of society to another, may be illustrated as follows: Farmers may be taxed on the produce of their land. They shift the tax to the wholesale dealers, who buy the products of the farmers, and who pay the prices of the products increased by the amount of the tax. The wholesale dealers charge the tax upon the retail dealers, and the latter pass on the tax to the consumer. The tax may stop here, and the incidence of the tax will be on the consumer.

In some cases, however, there will be still further shifting. The consumer is a laborer, and the commodities he buys enter into the cost of living. The greater the cost of living, the dearer will be his labor. Labor is paid for in wages. Hence the laborer will demand higher wages, and the tax is thus transferred to the employer who pays the higher wages.

The question of the shifting of taxes is very important, and should engage the attention of the government when it imposes a tax. Through the shifting process, it may be that some escape all burden of taxation, while those who are really made to bear the burden are the ones least able to do so.

The incidence of indirect taxes is never on the person who first pays the tax. In the case of customs duties, the tax is primarily paid by the importer, but it is shifted to the consumer of the imported articles, who pays the tax in the raised prices of the articles. The burden is felt wholly by the consumer. The same happens in all internal revenue taxes. They are paid ultimately by the consumer.

In such instances the fact and the method of the shifting of the taxes are apparent, and the government, in imposing such taxes, knows where the incidence lies.

Much difficulty exists in determining the incidence of direct taxes, and economic writers are little in accord on the question of the several direct taxes.

The Physiocrats claimed that all taxes ultimately fall on the

land: wherever they may be originally placed, they can be traced back until they finally fall on land. It was for this reason that they advocated a direct tax on land as the main source of government revenue in preference to a multiplicity of taxes which indirectly reverted to land.

It is generally admitted, however, that the poll tax, the inheritance tax, the personal property tax, and the income tax cannot be shifted. Yet even here exceptions may be found. An income tax which affects income derived from salaries or wages may be shifted to the employer, who has to pay higher salaries and wages. Again, when the income tax is paid not out of the profits of a business, but out of capital, the burden is felt principally by the laboring class, since every curtailment of capital diminishes the demand for labor.

Certain kinds of personal property will not allow of any shifting, *e.g.* household property, pictures, jewelry. But the tax on manufactured articles in the factory or in the store will ordinarily be shifted to the consumers of such articles.

Taxes that fall on consumption through the process of shifting are declared by some economists to be preferable to those taxes which must be paid by the persons immediately levied upon and which cannot be shifted. In the former case the burden is not felt by any one class. There is diffusion of the onus throughout society, and the disagreeableness of taxation is minimized, as the people do not notice the tax so much. Again, there is not the same inducement to dishonesty.

The United States government has always derived its revenues largely from this kind of taxes. The ordinary receipts of the United States in 1920 amounted to $6,704,414,438. The revenue received from Customs and Internal taxes (including income taxes) was, in the same year, $5,722,685,804, over 85 per cent of the total receipts. (Stat. Abstr., 1920, p. 769.)

Were, however, this method the only one employed, the inconvenience of taxation would be felt mostly by the poor, and a very inconsiderable burden would be placed upon many persons, who, being possessed of large means, should be reasonably ex-

pected to contribute to the support of the government according to their recognized ability.

As a matter of fact, the various classes of society gradually adapt themselves to the taxes imposed by the government. Economic conditions little by little conform to the demands made, and in regard to most forms of taxation the burden becomes widely distributed through the process of shifting. When the people have become reconciled to a definite kind and method of taxation, it is unwise to disturb the social and economic quiet by repeated readjustments of taxes.

Principles of Taxation. — The general principles affecting taxation are as follows: —

1. The taxes ought to be proportioned among the members of society according to their respective abilities.

This principle regards the equity of the tax. The possessions of the members of the state constitute the source from which taxes can be levied. Where there are no possessions of any kind, there can be no tax. The possessions of a citizen may consist of property, real or personal, and income derived from property or from labor. The ability to pay taxes will depend on the amount of possessions in the shape of property or income possessed by the payer.

All the members of society should bear a part of the burden of supporting the state, but it would be manifestly unjust to impose unconditionally a fixed and equal amount to be paid by each and every member of society.

Such a definite tax might be a light burden upon those who are rich, but it would be heavy upon those who possess little of this world's goods. The poor would be forced to contribute relatively more than the rich. Ten dollars a year would not be felt at all as a burden by the owner of a million dollars, but it would be a serious matter for those who are scarcely able to provide for themselves and their families the mere necessaries of life.

Taxes that would deprive a man of the capital or income absolutely essential for his own and his family's existence, or for the carrying on of his business, and that would prevent his sharing

in production, whereby the wealth of the country is increased, would injure the individual and would mediately destroy the general well-being of the nation.

Again, two individuals may have the same amount of possessions, but the possessions of one may be so affected by circumstances that they may not be able to bear an equal proportional rate of taxation. Thus, the possessions of one may be employed in business, may be engaged in a less lucrative occupation, or may be needed for the support of a larger family.

The equality of taxation that is advocated as the first principle of taxation does not mean, then, that all should be taxed equal amounts. Such a tax would be unjust.

Taxes should be proportional to the material ability of the taxpayers to pay taxes, *i.e.* to the amounts of the worldly possessions of the payers viewed with regard to attendant circumstances, and the degree of sacrifice endured by the payment of the taxes.

"Equality of taxation, therefore, as a maxim of politics, means equality of sacrifice. It means apportioning the contribution of each person towards the expenses of government, so that he shall feel neither more nor less inconvenience from his share of the payment than every other person experiences from his." (J. S. Mill, *Political Economy*, II, p. 308.) This is the doctrine most commonly held to-day.

Another view that is sometimes set forth is that every one should contribute according to the amount of benefit in the way of social protection and help he derives from the state. This must be rejected, because it reposes on the false conception that taxation is a right of the state by reason of a tacit contract between it and the taxpayer, through which the latter is obliged to give a *quid pro quo*, so much money for so much social benefit. Taxation reposes, as we have seen, on a natural ordination and not on any mutual contract.

It is true that a man possessed of a thousand acres of land, of houses and industrial plants, needs, in one sense, more protection from the state than does the poor man who owns no

realty; but property is not the only thing that needs and receives the benefit of social organization. This benefit regards also the persons and the activities of the members of society, and, from this point of view, the poor need more protection from the state than do the wealthy. The principle, therefore, would require, that while the tax imposed on the wealthy would be higher than that imposed on the poor, on the score of possessions, it would be higher for the poorer classes than for the wealthy, on the score of personal needs and dependency.

2. Taxes should be certain.

That the taxes should be certain is a rule which, in the opinion of many, takes precedence over the equable distribution of the tax.

It is claimed that it is morally impossible to arrive at absolute equality of burden imposed by taxation. Whatever efforts may be made to adjust the sacrifices, some will always feel the burden more than others, some will feel it more at one time than another, but in the course of time, when there exists no very glaring inequality or injustice, the members of society gradually come to resign themselves to the inconvenience, and, through the gradual shifting of the taxes, the burden becomes distributed throughout the different classes of society.

It is, however, important that there should be certainty in the amount of revenue derived from taxation. Indeed, the amount to be collected, the method of collecting, the times and places of the collecting, should all be definitely fixed.

People do not, as a rule, take graciously to the payment of taxes, even when the system of collecting the taxes is as perfect as it can be made. Taxpaying is a disagreeable duty. It is made all the more disagreeable when the taxpayers are left in uncertainty with regard to the amount to be paid, the articles upon which taxes are levied, and the time of collection.

In some Eastern countries, much inconvenience and loss were incurred through the uncertainty of the time at which the collectors would come to collect the taxes. Because the crops could not be gathered in until the collector appeared to estimate their

value and levy the tax, the delay in the arrival of the collector often brought about the loss of the entire crop, which rotted in the fields.

The *ad valorem* duties levied on imported goods lie open to objection under this rule. There is less certainty with regard to the amount that can be collected under this method than there would be if specific duties were levied instead.

3. Taxes should be levied at a time when the taxpayers find it most convenient to pay them.

When taxes are thus levied, much of the disagreeableness is taken off the burden. In this particular, indirect taxes have an advantage over direct, since the consumer, on whom the indirect tax falls, pays the tax when he buys the commodities. He can, in many cases, refrain from buying the article altogether, or he can limit his purchase in proportion to the amount he is content at the moment to pay.

Bonded warehouses here offer an advantage in permitting the merchants to defer the payment of the tax on goods they have bought, until such time as they are ready to take them out or until purchasers appear for them.

In the same way, bills of exchange made out for long periods allow the sellers of goods to defer the payment of taxes until the goods have been paid for by the purchasers.

4. " Every tax ought to be so contrived as both to take out and to keep out of the pockets of the people as little as possible over and above what it brings into the public treasury of the state."

Taxation ought to be as economical to the state as possible. It is unwise to impose taxes of such a nature that for various causes the benefit derived to the state will not be proportionate to the losses sustained by the taxpayers. There are several signs by which such uneconomical taxes may be recognized.

(1) Taxes are uneconomical when they have the effect of lessening production. Excessive taxation will produce this result. It will cause capital to withdraw from productive enterprises, and the wealth of the country will decrease. " When

taxation absorbs too large a share of the produce, labor is discouraged and economic decline sets in. Under Louis XIV, vines were uprooted to escape the taxes called Aids, which, according to Vauban, often amounted to the price of the vintage. The two most powerful empires of the world, the Roman and that of Charles V, were both ruined by excessive taxation." (E. de Laveleye, *Elements of Political Economy*, transl. by A. W. Pollard.)

Should the land tax exceed the economic rent of the land, the land will not be cultivated and production will decrease. When production is thus affected, the very source of taxes is lessened.

When taxes exceed the incomes, the taxes must be paid out of capital. This may not be an evil, nor can it always be avoided, but the diminution of capital should not be so great that it would bring about a marked decrease in production.

Should the tax on personal property be excessive, greater efforts will be made to conceal its ownership, and the owners may be driven to take up their domicile in other lands.

If heavy taxes are placed on productive property, industry will be hindered and the wealth of the country will be reduced. "In many villages in Palestine, the wealth-bringing palm trees have been torn up, because each tree was taxed." (E. de Laveleye, *Ib.*)

(2) Taxes are uneconomical when they require a great expenditure in collecting, due to the establishment of numerous officers and bureaus. Internal taxes on particular commodities would entail great expense in the collection. Such taxes were frequent in England in the past.

(3) Taxes are uneconomical when labor and capital are deflected by them from more productive to less productive industries. This happens, as was seen in preceding pages, as the result of tariff duties which divert capital and labor into industries from which the returns are less in profit and in product, in proportion to the amount of capital and labor employed, than they would be if employed in self-supporting industries.

(4) A tax is uneconomical when many are ruined by the

penalties and fines imposed on them for attempted evasion of the tax, and their capitals are withdrawn from active coöperation in the prosperity of the country.

(5) A tax is uneconomical when people are subjected "to the frequent visits and odious examinations of the taxgatherers, and exposed to much unnecessary trouble, vexation, and oppression." (Cf. Adam Smith, *Wealth of Nations*, Bk. V, ch. 2.)

The preceding four laws are laid down by Adam Smith and have become classical. In addition to these, the following principles may be given: —

5. The property of all persons should be appraised for taxation at the same ratio of value.

6. Taxes should be levied only for public purposes. Any tax that helps only one individual class is unjust.

7. Double taxation should be avoided, as it imposes a twofold burden upon the taxpayer. There is double taxation, for example, when the same objects or occupations are levied upon by both federal and state governments.

8. "Taxes ought never to be raised from immoral sources, such as lotteries and gambling houses." (De Laveleye, *Elements of Political Economy*, transl. by A. W. Pollard.)

9. All those things which constitute the necessaries of life should as far as possible be exempt from taxation. Instead of the necessaries, those things should preferably be taxed which conduce to the superfluous luxury of the wealthy, or which may become a menace to the morals of the community.

10. In like manner, in customs duties imposed on imports, those foreign articles should be taxed which minister to the luxurious tastes of the rich, rather than those which are of daily need to the poor.

11. Personal property, which is generally unproductive, should be taxed rather than immovable property which is employed in a productive capacity and serves in the various industries to increase the wealth of the country.

12. Establishments which, like hospitals, etc., are intended for the use of the public should be free from taxes.

III. Public Debts

Public Loans. — When a country cannot collect through taxation sufficient revenue for the maintenance of the government, it must resort to raising money by loans.

A country contracts a debt when it issues bonds which mature at some future date and pay interest until maturity. All the holders of such bonds become the creditors of the government.

The money lent to the government on bonds may come from the inhabitants of the country; or the bonds may be bought up in great measure by foreign bankers and investors, and thus a large amount of foreign capital may be brought into the country. This is an advantage in one sense, but when a country that has borrowed abroad comes into financial straits, it may be exposed to disagreeable interference on the part of the foreign powers whose monetary interests become endangered.

Bond issues made in order to raise revenue impose a burden upon future generations. The interest on the bonds must be paid until the maturity of the bonds, and this interest as well as the principal ultimately must come from taxes imposed on the citizens.

Loans should not ordinarily be resorted to as a means of raising revenue. The country should depend on its own internal resources and find in taxation a sufficient source of revenue.

It is contended that there are only two circumstances that would reasonably warrant government loans: —

1. The sudden emergency of a war, which may not easily be foreseen and which will entail extraordinary expense.

2. The construction of public improvements that will benefit not only the present generation but all generations to come. When such public works are to be made use of by future generations, it is only right that they should bear a part in the expense.

Public Debts. — The debts contracted by a government are of various kinds: —

(1) *Floating Debt.* — A floating debt consists of the short-term obligations of the government, unsecured by any fund.

Such obligations resemble the current obligations in the form of promissory notes incurred by business men in the course of business.

(2) *Funded Debt.* — A funded debt consists of formal obligations issued by the government guaranteeing the payment of interest up to maturity and the payment of the principal at maturity. These obligations are government bonds.

(3) *Refunded Debt.* — A funded debt represented by bonds bearing a certain rate of interest may, before or at maturity, be changed into a new debt represented by bonds bearing a lower rate of interest. The debt is then said to be refunded. In 1900 (Mar. 14), the 3, 4, and 5 per cent bonds of the United States then outstanding were converted into the 2 per cent consols; that is, the older bonds were paid off with the money raised by issuing the new bonds.

On Oct. 31, 1921, the interest-bearing debt of the United States was as follows:

Consols of 1930	2 %	$599,724,050
Loan of 1925	4 %	118,489,900
Panama Canal Loans	2, 3 %	124,901,580
Conversion Bonds of 1946–47	3 %	28,894,500
Postal Savings Bonds	2½%	11,774,020
First Liberty Loan	3½, 4, 4¼%	1,952,162,100
Second Liberty Loan	4, 4¼%	3,314,095,200
Third Liberty Loan	4¼%	3,608,919,350
Fourth Liberty Loan	4¼%	6,350,938,950
Victory Liberty Loan	3¾, 4¾%	3,644,895,400
Treasury Notes	5½, 5¾%	701,897,700
Certificates of Indebtedness (various)		2,078,593,000
War Savings Certificates and Thrift Stamps		663,969,378
		$23,199,255,128

(Financial Statement, U. S. Gov.)

QUESTIONS

1. What are the sources of government revenue?
2. What is the extent of the public domain of the United States? How can revenue be derived from it?

3. How can public businesses become a source of revenue?
4. How is revenue collected through fines, fees, and assessments? What are the evils of the fee system? What advantage is claimed for it?
5. What is a tax? Whence arises the right of the state to tax?
6. Give the different kinds of taxes. Explain briefly each kind. Why are some taxes called direct taxes, and others indirect taxes?
7. What methods are used to gain knowledge of the property of taxpayers?
8. What occupations are taxed in the United States?
9. What is an income tax? Does there exist a federal income tax in the United States? What income is taxed? What is a progressive income tax? What is a permanent income? A temporary income? Should both be taxed equally?
10. What is an inheritance tax?
11. How are taxes on corporations estimated? Explain the federal corporation tax as it exists in the United States.
12. What are internal revenue taxes? Who pay them? What difficulty is presented in internal revenue taxes? What articles are taxed in the United States for internal revenue?
13. What are export duties? Import duties? Why should excessive import duties not be levied on the necessaries of life?
14. What are stamp taxes?
15. What is meant by incidence of taxes? Shifting of taxes? Illustrate the shifting of a tax. What taxes are shifted? What taxes cannot be shifted?
16. Are indirect taxes better than direct taxes?
17. Give briefly the principles affecting taxation. Explain each one.
18. What is meant by equality of taxation? What is meant by saying that taxes should be certain?
19. How can taxes prove uneconomical?
20. How are government loans made? When are government loans justifiable?
21. What is a floating debt? A funded debt? A refunded debt?

CHAPTER XIX

INSURANCE

Definition. — Insurance is a contract by which one party, the underwriter or insurer, agrees, for a consideration, to make good a loss sustained by another party.

History. — Although modern insurance was quite unknown in past times, yet there are traces of insurance of some sort as far back as the Middle Ages. Probably the first indication of it may be found in the loans in bottomry, which appear in the thirteenth century.

Bottomry loans resembled a wager. The owner of a ship about to set out to sea wagered with a money lender that his ship would be lost on the voyage. The amount of the wager was a definite sum of money, which was advanced to the ship-owner. If the ship was lost, the money lender was out the amount of the wager. If the ship returned, the money lender won the wager and received the amount advanced together with interest.

The principle of insurance was carried into practice in Italy in the beginning of the fourteenth century. In the books of Del Bene e C'i are found the costs of insurance in sea and land transportation for the years 1318–1320. The oldest official document pertaining to insurance is dated April 22, 1329. (Huppert, " Versicherungswesen," in *Staats Lexicon.*)

A species of insurance or help extended to the sick and the aged prevailed among the guilds of the Middle Ages. (*Journal of Political Economy*, Sept., 1903, pp. 589, 590. Cf. Frankel and Dawson, *Workingmen's Insurance in Europe*, p. 169. Cf. E. Levasseur, *Histoire des classes ouvrières et de l'industrie en France avant 1789.*)

Record of payment of indemnity for losses by fire may also be found among the guilds. (*International Encyclopedia*, "Fire Insurance.")

Evidence exists of the practice of insurance in Genoa in the fourteenth and fifteenth centuries. The first Mutual Insurance Company is found in Portugal, in 1383. (Huppert, "Versicherungswesen," in *Staats Lexicon.*)

Stock companies began in the seventeenth century. (Huppert, *Ib.*)

Before the beginning of the eighteenth century, Italy, Spain, Portugal, and the Netherlands carried on insurance against risks at sea. After that time, there sprang up in England numerous companies insuring against transport risks. (Huppert, *Ib.*)

Traces of life insurance may be found in the fifteenth century (Huppert, *Ib.*), but it developed principally in the eighteenth and nineteenth centuries. In America, it appears for the first time in 1759, in Philadelphia, in the form of the Presbyterian Annuity and Life Insurance Company. In Massachusetts, it makes its appearance in 1812 as the Massachusetts Life Insurance Company. (*Intern. Encycl.*) In 1830, the New York Life and Trust Company, and in 1842, the Mutual Life Insurance Company were organized in New York.

Fire insurance appeared in England in the seventeenth century. It gradually spread over the whole world during the eighteenth and nineteenth centuries.

Present Extent of Insurance Business. — The business of insurance has advanced rapidly and extensively, so that to-day the amount of money invested in insurance of various kinds runs into the billions of dollars.

Insurance in its various forms, life, fire, marine, industrial, casualty, reaches every species of social activity, and exerts an influence on every phase of society. Its vast accumulations of wealth, invested in countless enterprises, contribute in no small degree to the development and prosperity of the state.

The following tables will help to show the extent of insurance business: —

I. Foremost American Life Insurance Companies, 1919

	Insurance in Force	Gross Assets
New York Life, N. Y.	$3,127,000,000	$961,000,000
Metropolitan, N. Y.	2,765,000,000	864,000,000
Equitable Life, N. Y.	2,270,000,000	599,000,000
Mutual Life, N. Y.	2,089,000,000	662,000,000
Prudential, N. J.	1,947,000,000	598,000,000
Northwestern Mutual, Wis.	1,916,000,000	440,000,000

(Insurance Yearbook, 1920.)

II. Life Insurance in Force in Various Countries, 1912

United States	$18,002,000,000	Austria	$1,035,000,000
Germany	3,368,000,000	France	708,000,000
Canada	860,000,000	Scandinavia	586,000,000
Switzerland	191,000,000	Russia	537,000,000

(Insurance Yearbook, 1912.)

III. Fire and Marine Insurance Companies in U. S., 1919

Capital	$163,000,000
Total Assets	1,391,000,000
Total Income	884,000,000
Fire Losses paid	335,000,000
Dividends paid	52,000,000
Net Premiums	810,000,000

(Insurance Yearbook, 1920.)

IV. Gross Assets of Foremost American Fire Insurance Companies, 1919

Home, N. Y.	$54,000,000	Insurance Co. of N. A.	$34,000,000
Hartford, Conn.	50,000,000	Fidelity-Phenix, N. Y.	25,000,000
Continental, N. Y.	39,000,000	National, Conn.	24,000,000
Ætna, Conn.	37,000,000	Phœnix, Conn.	21,000,000
Great American, N. Y.	33,000,000	Springfield Fire & Marine, Mass.	17,000,000

(Insurance Yearbook, 1920.)

V. Casualty Insurance in the United States, 1919. Premiums Received

Accident	$55,636,000
Health	13,368,000
Liability	75,537,000
Burglary and Theft	12,103,000
Fidelity	14,755,000
Surety	26,426,000
Plate glass	9,488,000
Steam boiler	4,607,000
Workmen's Compensation	102,498,000

(Insurance Yearbook, 1920.)

Nature and Advantages. — The special economic importance of insurance is found in the fact that it reduces the aggregate social cost of providing against the risks from personal accident, fire, shipwreck, and other calamities to which the members of society are exposed in the course of business.

All men run a certain amount of risk, and the more engaged one becomes in the various activities of life, the greater number of risks does one run. The uncertainty of the time of death or bodily accident faces all men. The business man is exposed to dangers necessarily connected with his business — fire, explosions, earthquake, shipwreck, strikes, dishonesty of employees, etc.

Every prudent man engaged in business must take account of the risks he incurs and must insure himself against the many uncertain losses to which he is exposed. He must set aside

a part of his capital and establish a fund to reimburse himself when actual disaster befalls him.

If he insures himself, the fund must necessarily be very large, and should there be no other means save individual insurance, the amount of money set aside by all the individuals in the shape of individual insurance funds would be enormous, and would diminish considerably the amount of money available for production. When an insurance company undertakes the business of insurance, the fund set aside need be but a very small proportion of the sum required in the case of individual insurance.

Each individual is enabled to make an immense saving by transferring his risks to a company that deals in insurance business. He attains his end by the payment of a comparatively small insurance premium. Herein consists the great economic advantage of insurance.

A second advantage of insurance lies in the fact that the losses sustained through the calamities to which all men engaged in business are exposed, are widely and lightly distributed over a great number of persons and do not fall solely and crushingly upon the individuals who actually suffer the losses.

Insurance, moreover, becomes an important economic factor in production, by gathering together from many small sources a vast sum of money which serves as possible capital in various productive industries. In this manner insurance resembles banking.

Again, life insurance, for example, offers special advantages over the savings bank, for a person who has put his money in a savings bank may withdraw it at any time from the bank, whereas money invested in life insurance ordinarily remains there.

Insurance is an indirect aid to production by doing away with the fear of the risks and uncertainties of business ventures, and by encouraging men to embark in productive undertakings with greater zeal and larger expenditure of capital.

Theory. — An insurance company can do, without loss and even with great gain to itself, what it would be extremely burden-

some for many individuals to do for themselves. It can do this, because of the operation of several principles which lie at the foundation of insurance.

The risks of several thousands of individuals are grouped together. Each individual pays a small sum into what becomes a general fund, out of which the losses are to be paid upon the occurrence of some uncertain accident. The average losses that occur in a given time may be found from the actual losses that have occurred in several periods of the time in the past, and the amount of the premiums may be so fixed that the sum accumulated from them may cover the probable average losses in the coming given time, besides paying the operating expenses of the company. Many who have paid their premiums will escape all loss, and these will help to pay the actual losses that do occur in the given time.

For the actual losses that do occur in the given time, the insurance company will have to pay out of its fund accumulated from the premiums it has received, but these premiums are put at such a figure that they will cover the probable losses in the given time. If the actual losses of a certain company should happen to exceed the probable losses, the company would lose money or fail; but the greater the number of cases insured, the less is the risk that the actual losses of the company will exceed the average losses.

Hence, the danger the insurance company runs of meeting failure diminishes with the number of insured persons it can gain. "According to a well-established law, the probable variation increases only as the square root of the number of cases. If there are a hundred times as many houses, there will be only ten times as much probable variation from the average loss." (Seligman, *Principles of Economics*, p. 555.)

A practical example may illustrate the principles affecting insurance: An insurance company insures 1000 individuals. Each is insured in the sum of $5000, making a total of $5,000,000. The table of averages of occurrences of the event insured against, *e.g.* death, accident, sickness, fire, or whatever it may

be, gives, for instance, the figure 45 as the average number of times the event will happen among 1000 persons in one year. Out of the 1000 persons, 45 will die or fall sick, or suffer fire or other loss in the ensuing year. This average number, 45, is got by a study of past years. In several previous yearly periods, it was found that on the average 45 out of 1000 suffered loss.

In any particular group of 1000 persons, however, the number who suffer loss may frequently vary 5 above or below the general average; that is, the number may be 50 or 40. The insurance company therefore makes its plans on the basis of 50 losses. This would entail an outlay of $250,000 for the year. The premium paid by the 1000 individuals will have to equal in the aggregate $250,000, or, the individuals will have to pay, in premiums, each $250.[1]

Notice here the economic saving. Instead of the 1000 individuals having to put aside the sum of $5,000,000, to reimburse them for the loss to which they are exposed, as they would have to do if they would insure themselves individually against the loss, only $250,000 is accumulated for the same purpose; and instead of each individual putting aside $5000 as a fund against loss, he need pay but $250 for the same end.

If the actual losses during the year are below the number provided for, if they are, for example, 47 instead of the 50, the year's outlay among the 1000 insured will be $235,000. After the company has paid out the sum, $235,000, it has left $15,000, the excess out of the $250,000 it originally received in the form of premiums, and this sum constitutes the year's profits for the company.

Furthermore, as the number of insured persons increases, the *actual* number of cases of loss will be proportionately closer to the *average* number. If, then, the company that had 1000 persons insured should increase that number to 100,000 persons, it could calculate the probable number of losses more closely.

[1] Besides an additional amount for the expenses of the company, which, for the sake of simplicity, is not included here. The subject is treated on pages 359, 360.

As a further consequence, the premium demanded of each of the 100,000 individuals might be reduced.

We have supposed that 45 was the average number of cases of loss, and the probable variation 5, when the number of persons insured was 1000. If, now, the number of the insured has increased 100 times, *i.e.* to 100,000, the average number of losses among the 100,000 will increase 100 times, or to 4500; but the variations increase only 10 times, *i.e.* to 50, so that in any particular 100,000 cases the losses might be 4550 or 4450. Such, we have seen, would be the variation of actual cases from the average, upon the increase of risks. Here the total amount of the loss, if 4550 of the insured 100,000 are affected, will be $22,750,000. The premiums must cover this sum. That they may do so, the 100,000 individuals must pay $227.50 each.

The premium could be reduced to some such figure, but as a matter of fact it is not. It is to the advantage of an insurance company to keep the premium as high as possible, even when the number of policyholders has greatly increased. Thereby its profits will be increased, and the possibility of loss to the company will be lessened. Unrestricted competition, if carried on in the matter of rate-cutting, would bring disaster to many existing companies. Here large companies with great numbers of policyholders would have a decided advantage over smaller companies. Hence it is the aim of insurance companies to fix and adhere to a uniform premium rate. This is done by tacit agreement among the different companies or by the union of local or national companies into local or national organizations respectively.

It may be that the actual occurrences of an event insured against may vary, in any given year, more than expected from the average occurrences established by the table of statistics, so that the payments may be more, that year, than the receipts; but, as the operations of the company extend over many years, the yearly profits will in the long run counterbalance the yearly losses. It is to be noted, too, that any great increase in actual occurrences in a year will affect the table of average occurrences

in the next yearly calculation of averages, and a rise in the average would cause an increase in the premium for future policies.

It will be readily understood that many other factors enter into the subject of insurance, making it much more complicated than it would here appear to be. The object of the preceding explanation has been merely to give a brief account of the economic aspect of insurance.

Insurance business may be carried on by two kinds of companies: Joint-stock Companies and Mutual Companies.

Joint-stock Companies. — A joint-stock company is formed by a number of capitalists, who subscribe a certain amount of capital and become shareholders in the company. The capital subscribed is a guarantee fund for the payment of losses suffered by the insured. The officers are chosen from among the shareholders, and they control the management of all business. The profits of the business go to the shareholders in the form of dividends.

Mutual Companies. — A mutual company is composed of the persons insured, the policyholders. They elect the officers and have a voice in the management of the company either individually or by proxy. The funds requisite to pay losses are obtained by assessments on the members. After a time, however, a reserve fund is created from the premiums paid in, and this fund serves for the liquidation of liabilities. When profits arise from the business, they are distributed among the policyholders.

Premium. — The premium is the sum paid by the insured to the insurance company. It is paid every quarter or half year, every year, or every three or five years, a reduction in the premium being given for the greater length of time.

Policy. — The policy is the written contract detailing the application of the person who is insured and the agreement of the company to insure him, with the various conditions under which the contract is entered upon.

Reinsurance. — Reinsurance is the practice of many insurance companies of again insuring the risks they have accepted in

some other insurance company. A reinsurance reserve fund is usually set aside for the purpose. There are certain insurance companies whose business is wholly restricted to reinsurance.

Reinsurance distributes the danger of loss over a large territory, and may be the means of safeguarding the financial standing of an insurance company at a period when the actual losses far exceed the average losses upon which the calculation of premiums has been made.

Kinds of Insurance. — Insurance may be divided according to the object affected into Personal Insurance and Property Insurance.

(1) *Personal Insurance.* — Personal insurance embraces: —

Life Insurance, by which the payment of a certain amount is assured to a specified person upon the death of the person insured, or after the lapse of a specified time.

Accident Insurance, by which the payment of a certain sum is assured when an accident befalls the insured.

Health Insurance, by which a certain sum is assured to a person during sickness.

Fidelity and Surety Insurance, which insures against dishonesty on the part of employees and public officials, and against the failure of executors and administrators in the performance of their duties.

(2) *Property Insurance.* — Property insurance embraces the following kinds: —

Fire Insurance, against fire.

Marine Insurance, against losses at sea.

Transit Insurance, against loss of or damage to merchandise during transportation.

Stock Insurance, against loss of live stock.

Accident Insurance, which includes a great variety of kinds, insuring against accidents from hail, tornado, elevators, automobiles, machinery, etc.; against accidents that may happen to plate glass, boilers, etc.

Credit Insurance, against losses from bad debts to which business men are liable.

Employers' Liability Insurance, against claims for damages made against employers because of accidents suffered by employees.

Mortgage Insurance, which guarantees the validity of mortgages.

Some of the kinds of insurance mentioned above deserve special notice.

Life Insurance. — Life insurance is carried on by joint-stock or mutual companies.

Life insurance may be straight life insurance or it may be term insurance. The former embraces the whole period of a person's life; the latter is limited to a certain definite number of years.

Endowment insurance is a species of insurance by which a person is to receive a specified sum of money, if living at the expiration of a certain number of years.

The premium in life insurance is determined from the Mortality Tables, which show the average number of deaths in a given number of persons of successive ages. These tables are made out usually from actual past experiences.

The premium determined for one year by the calculation of the risk found in the tables less the year's interest is called a natural premium.

In the case of term insurance covering a number of years, the premium is usually fixed at a uniform amount to be paid annually during the period in which the insurance is in force. This is known as the " level " annual premium.

A life policy may be given for a limited number of annual payments of a fixed premium. Such a policy is a limited payment policy, and the annual premium is fixed at a figure high enough to cover the risk of the company.

When a person insured in a mutual company contracts not to participate in the surplus funds of the company and resigns all claim to dividends, his policy is called a non-participating policy, and his premium is fixed at a lower rate.

The premium consists of two parts, the net premium and the

loading. The net premium covers the average risk incurred; the loading is an additional amount intended to cover the possibility of the actual cases exceeding the average cases, but principally to defray the expenses of the insurance company.

Each person must pay his quota of the expenses incurred in the management of the business. These expenses are at times very great, frequently due among other things to the extravagant salaries paid the officers and to the great army of solicitors who are employed by the companies and are paid large commissions. The average amount of the loading in all kinds of life policies is about 30 per cent of the net premium.

An immense amount of life insurance business is written in the course of a year. Thus, in 1919, the total number of new policies issued was 2,160,321, to the amount of $5,213,897,389. All these policies, however, are not permanent. Many of them cease through *lapse*. A policy is said to lapse when the policyholder fails to pay a premium when due.

Other policies cease through *surrender*. A policy is surrendered when the policyholder returns his policy to the company and receives its surrender value.

The number and the amount of policies that cease through lapse and surrender is very large. Thus, for the year ending Jan. 1, 1920, in the New York life insurance companies, the

Number of policies lapsed was 303,657, Amount, $468,684,855
Number surrendered was 131,420, Amount, $289,397,540
(Insurance Yearbook, 1920, p. 282.)

Gradually a large amount of money accumulates in the possession of an insurance company, from the premiums paid in, the policies that have lapsed, and the fact that deaths are fewer than estimated from the tables of statistics. This money forms a surplus and a reserve fund, out of which dividends are paid to the stockholders, in joint-stock companies, and to the policyholders, in mutual companies, and provision made for the payment of endowments and terminated policies.

The surplus money of the company is invested in various

ways, so that a large yearly income is received. Investments are made in government bonds, railroad bonds and stocks, and the stocks of various industrial concerns. Income is also derived from loans on mortgages, collateral, and policies. The larger the income derived by the company from these various sources, the lower need be the premiums demanded upon policies, and the higher may be the dividends paid out to the stockholders or policyholders.

Fire Insurance. — Fire insurance companies are organized as joint-stock companies or as mutual companies. A person insured in a joint-stock company pays a definite premium and becomes entitled to indemnity should he suffer a loss by fire. A person insured in a mutual company usually pays a cash premium and is further liable to be assessed a certain amount to cover losses.

Mutual companies are often formed embracing men engaged in some one line of business. In this way mills and factories are insured.

A person or a corporation having a chain of houses or plants distributed over a wide extent of country may find it more economical to organize an insurance fund formed by contributions from all the individual houses or plants, than to pay the large premiums required by insurance companies.

A person who insures usually distributes his insurance among a number of companies. He will thus have stronger guarantee of recovering indemnity for any loss he may sustain.

When a person insured suffers a partial loss by fire he will receive indemnity to the full extent of the loss, if he has insured up to 80 per cent of the value of his property. If he has insured for less than 80 per cent he is considered to be a coinsurer with the company to the extent of the difference between his actual insurance and the 80 per cent. In case of partial loss by fire, he receives from the company but a percentage of indemnity proportional to the amount insured.

Thus, if a man owning property worth $100,000 insures for $80,000, and pays the premium on that amount, and then suf-

fers a fire loss to the property to the extent of $10,000, he will recover the full amount, $10,000, from the insurance company. If he insures the property for $40,000, he then, upon a fire loss of $10,000, will recover only $5000. Having insured only to the amount of $40,000, he is supposed to be a coinsurer of his own property to the sum of the other $40,000, and must pay half the indemnity for the loss.

This 80 per cent coinsurance clause was adopted generally by the fire insurance companies in New York, New England, and many of the principal cities in other parts of the country from 1892 to 1899. The clause, however, does not apply to dwellings and their contents.

Fire insurance companies, to-day, have undertaken much in the way of preventive measures, so as to lessen the danger of fire or the loss attendant on fires. They have been able to induce many of the insured to adopt various precautions against fires, and through the fire patrols supported by them, they are able to diminish property loss considerably.

The need of fire insurance may be gathered from the fact that the property loss from fires in the United States amounted, in 1908, to $217,885,850; in 1909, to $188,705,150; in 1910, to $214,003,300; in 1911, to $217,004,575. During twenty-five years (1886–1911), the property loss amounted to over $4,516,000,000. (Cf. Bulletin 418, Department of the Interior, 1910. Cf. Insurance Yearbook, 1912, p. 461.)

The premium in fire insurance depends on the risk that is assumed by the company. The risk depends on the value of the property insured, the time during which the insurance runs, the probability of fire in the class of property insured, and the probable destructiveness of the fire, if it occurs. All these factors will determine the amount of the premium. Preventive measures undertaken spontaneously or at the suggestion of the company insuring will ordinarily lessen the amount of the premium.

The probability of fire occurring in different kinds of property brings about a classification of property. The risk under this

head is not the same for all kinds of property. Classification is indeed necessary, but many owners of property object to the classifications sometimes made, because their property, though less exposed to the danger of fire, is classed with property more liable to the danger. The distribution of the burden of insurance thus unjustly affects the safer property. This alleged discrimination has led the owners of special kinds of property to adopt a means of mutual insurance among themselves.

Fire insurance may indirectly be the cause of increasing the number of fires. This may be brought about by the greater carelessness engendered in the owners of property in guarding against fire, and even by furnishing an incentive to incendiarism in the hope of acquiring the insurance money. When property is insured to its full value or, especially, above its value, the incentive is all the greater.

Industrial Insurance. — (1) *Workingmen's Insurance in General.* — Various systems for the relief of workingmen, in cases of accident, sickness, unemployment, old age, or death, have existed in the past, and exist to-day in the numerous workingmen's associations, trade unions, and benefit societies.

The benefit system is widespread in the United States in local and national labor unions, railroad unions, and local industrial establishments.

In several foreign countries, the government has insisted that the employers insure the life and limbs of the employees, and make provision for sickness and old age and unemployment. Such insurance in some form or other, and embracing different kinds of benefits varying in the different countries, is compulsory in Norway, Holland, Belgium (miners), Italy, Germany, Austria, France (miners).

The principle that the care of the workingman under all the vicissitudes to which he is exposed in the performance of his labor — accident, sickness, unemployment, old age, death — should become an integral and necessary part of the cost of production, and should be borne by the industries in which the workingmen are employed, and not wholly by the workingmen, has been

strongly insisted upon within the past quarter of a century, and has taken root in many foreign countries.

Under the employer's liability laws of this country, damages for injury or death incurred in the course of work can be obtained through a civil suit brought by an employee or his representative. The plaintiff must prove negligence on the part of the employer. The employer may plead in his own defense contributory negligence on the part of the employee, negligence of a fellow servant, or the deliberate assumption of risk by the employee when he engaged in the work. A change, however, is being gradually effected. In thirty-five states workmen's compensation laws have superseded the employer's liability laws.

The compensation laws make obligatory the insurance by the employer of employees in certain hazardous occupations, and provide for automatic and practically immediate relief of the employee or his family in case of bodily injury or death. The amount of compensation to be paid in each case of injury is determined by a commission. The basis of compensation is the weekly wage received by the employee. A definite percentage of the weekly wage is paid, and the number of weeks during which a person is entitled to compensation under the laws is determined by the nature and the gravity of the injury. The employer is, moreover, obliged to furnish at his own expense medical or surgical attendance to the injured employee during a specified period after the injury. The long delays and the expense of court proceedings hitherto imposed on the laborer are avoided, and the pleas admissible in the past and frequently sufficient to absolve the employer from all responsibility are no longer accepted.

(2) *Definition of Industrial Insurance.* — Industrial insurance strictly so-called may be defined as "life insurance for small amounts, chiefly on the lives of wage earners and members of their immediate families, with premiums payable weekly and collected from the houses of the insured." (J. F. Dryden, *Life Insurance and Other Subjects.*)

Life insurance is ordinarily limited to well-to-do persons,

who can afford to pay the semiannual or annual premiums to the insurance companies. Such insurance is usually beyond the means of the poor. Efforts, however, have been made to bring the benefit of life insurance within the reach of the poorer classes.

(3) *Growth.* — The Prudential Assurance Company of London was started for the benefit of the poor in 1854. The English government sought to extend the advantages of this kind of insurance still further and established in 1864 a system of post-office life insurance. Every postmaster became an insurance agent. The system met with but very little success, and although it is still in existence comparatively few policies are issued.

Industrial insurance was extensively taken up by private companies and has spread over the world. In 1909 there were about 58,000,000 industrial policies in force in the world.

In the United States, the Prudential Friendly Society was started in 1875, and in 1877 was changed into the Prudential Insurance Company of America. The aim of the company at its inception was to provide against sickness, accidents, old age, and to insure a burial fund for adults and children. The business came in time to be limited to the insurance of a sum certain payable at death. In 1878 numerous other companies took up the business of industrial insurance, and it has grown immensely during the past thirty years. In 1919 the number of policies reached 45,319,318, amounting in value to $6,306,281,080. The policies written in 1919 amounted to $1,342,939,343. (Cf. Insurance Yearbook, 1920, p. 292.)

(4) *Advantages.* — The economic advantages of industrial insurance are very great. It engenders a spirit of thrift and self-respect among the poorer classes. It diminishes the rate of pauperism and reduces the expenditure of the state for the housing and the care of its helpless poor and their burial at death. It leads the way to ordinary life insurance, which opens up a means of saving and investing for persons of even small incomes.

(5) *Objections to the System.* — There can be no doubt that

industrial insurance is of immense economic and social importance, but it is claimed by many that the system, as at present carried on, is decidedly evil and a means of robbing the poor. The defects of the system may be thus summarized: —

1. The premium charged the workingman is nearly double that charged in ordinary life insurance.

2. The benefit received by the industrially insured is but a fraction of that received for the same expense in ordinary life insurance.

3. The benefit received is in many cases less in amount than the sum total of the premiums paid in.

4. The great spread of industrial insurance is due to the agents, who by specious arguments and persuasion induce ignorant workingmen to insure in industrial insurance companies. Indeed, it might be claimed that the great spread of industrial insurance is an indication of the ignorance of the poorer classes and of the weakness of human nature, that allows itself to be cajoled by persuasive agents into giving proportionately large sums, under the guise of small weekly payments, for a correspondingly small return.

5. The expense of maintaining the system of agents and collectors is great, and must ultimately be borne by the policyholders.

6. The rate of the lapsing of policies is high. Fifty per cent of the policies written lapse before the end of the first year. When a person insured allows four weeks to pass without payment, he loses all he has previously paid in as premiums.

(6) *Answers to the Objections.* — In refutation of the foregoing objections, the friends of the system advance the following points in its favor: —

1. Industrial insurance is essentially for the very poor, for those who are not able to invest in ordinary life insurance. For them it is industrial insurance or no insurance at all. If there is any social or economic advantage at all in insurance, industrial insurance brings that advantage within the reach of persons who otherwise could never profit by insurance.

2. Industrial insurance is primarily to provide a sum certain in the case of death, for the payment of the cost of last sickness, burial, and cemetery plot. The insured are anxious to obtain provision of this nature and seek no other advantage from their insurance.

3. Industrial insurance cannot be carried on without solicitors or collectors. Such is the improvidence and thoughtlessness of the class of people dealt with, that they will not of themselves take the thought and the trouble to pay in their weekly premiums. They need to be helped by the weekly visit of the agents. This fact was brought out in England when the post offices were made insurance institutions. The number of policies written by them was ridiculously small compared to the number written by private companies that employed the system of soliciting.

4. Industrial insurance costs more than ordinary insurance, because the accommodation granted in industrial insurance is greater. The insured are saved all worry about payment of premiums, since the collector comes to their homes at the time of the receipt of their weekly income and collects the premium.

5. Industrial insurance is installment insurance. The part payment plan in the case of all kinds of purchases supposes a higher price.

6. The risk in industrial insurance is greater, because the workingmen insured are more exposed to dangers of accident and death, and this greater risk justifies the greater cost of industrial insurance.

7. Lapses are a necessary element corresponding to the waste occurring in all forms of industry. They occur as well in ordinary life insurance. Efforts are constantly made by the industrial insurance companies to reduce the number of lapses. Moreover, the insured who allows his policy to lapse has had, while he paid, the benefit of the insurance and the special accommodation in the method of paying his premiums. (Cf. J. F. Dryden, *Life Insurance and Other Subjects*, ch. IV.)

(7) *Remedy.* — A remedy for the evils of industrial insurance was proposed and carried out in Massachusetts, in 1907. A

law was enacted permitting savings banks to establish departments for the issue of life insurance and annuities.

The forms of policies issued are: —

1. Straight life policy, in which premiums cease at the age of 75.
2. Endowment policy, maturing at age 65.
3. Endowment policy, maturing in 20 years.
4. Insurance and annuity policy.
5. Old age pension policies.

The maximum life insurance that may be taken by a person in any one bank is $500, and the maximum annuity $200, but policies may be taken by a person in two or more banks. (Report of Commissioner Labor, 1908.)

It is thought that savings banks, already fully equipped as they are, can manage the insurance business without the outlay of expenditure incidental to the present system. The house-to-house collection of premiums is dispensed with, eliminating the expense due to the collecting system. The advantages of insurance will be perceived by the working classes without the need of persistent persuasion on the part of agents, when they recognize the safety of their investment and the low price at which they can obtain such advantages. (Cf. L. D. Brandeis, *Savings Insurance.*)

QUESTIONS

1. What is insurance? Give a short historical account of insurance.
2. What is the extent of insurance business to-day?
3. Explain by example the economic advantage of insurance.
4. Give the theory of insurance.
5. What is a joint-stock company? A mutual company? Define premium; policy; reinsurance.
6. What are the different kinds of insurance? What kinds of insurance come under personal insurance? What under property insurance?
7. Explain under life insurance what is meant by straight life insurance; term insurance; endowment insurance. How is the premium determined in life insurance?
8. What is a limited-payment policy? A non-participating policy? Describe what is meant by loading.

9. When does a policy lapse? When is it surrendered? What becomes of the sums of money accumulated by an insurance company?
10. Explain joint-stock and mutual fire insurance companies.
11. Explain coinsurance.
12. How is the premium in fire insurance determined?
13. Give a general account of workingmen's insurance.
14. What is industrial insurance? Describe its growth in the United States.
15. What are the advantages of industrial insurance?
16. State some of the objections made against industrial insurance as carried on to-day.
17. Answer the objections.
18. What remedy has been adopted in Massachusetts against the alleged evils of the present system of industrial insurance?

CHAPTER XX

CONSUMPTION. SPENDING. SAVING. INVESTING. POVERTY

I. Consumption

Definition. — Consumption is the second division of Political Economy. Consumption is defined as the use which man makes of riches for the obtaining of his needs. (Gide, *Principles of Political Economy.*) Again: "Economic consumption is the enjoyment of the utilities which wealth is capable of offering." (Fetter, *The Principles of Economics.*)

Kinds of Consumption. — Consumption is public when carried on by the state. Its results are seen in the educational establishments, the hospitals, the sanatoria, the parks, erected and constructed at public expense. Consumption is private when carried on by private individuals in the satisfaction of their own wants.

Consumption is sometimes divided into Productive and Non-productive. Productive consumption occurs when the objects are used so that they may serve to produce more wealth. This is not consumption in our present sense. It occurs in actual production. Non-productive consumption occurs when the objects satisfy a want, without reference to the fact that they are or are not destroyed. This is the final term of production.

Explanation. — Consumption is not necessarily destruction. There may be destruction, as in the case of food and fuel. There may be but gradual destruction, as in clothes, furniture, houses, etc. There may be no destruction from wear, as in a statue or a painting.

Consumption is the ultimate aim of production. There are some who conceive production of wealth to be an end, and who would make the consumer but a part of the mechanism the

object of which is the production of wealth. This view is prevalent to-day.

The betterment of society as a whole, the betterment of the individuals who compose society, should be the aim of all productive effort. Yet in the present state of things, a great portion of society is in misery. Thirty per cent of the population of England are in poverty, *i.e.* have not wherewith to procure the necessaries of life. In America, perhaps fifteen or twenty-five per cent are in the same condition.

In the consumption of goods, man seeks the satisfaction of three orders of wants: those which relate to the necessaries of life; those which relate to the decencies or comforts of life; those which relate to luxuries. The rational man, in the consumption of goods, should seek to gratify his wants in the foregoing order. Morality requires the same order. As a matter of fact, impulse, habit, or fashion determines very often the actions of men in this matter.

Consumption has naturally a great influence on production. It constitutes the term "demand," while the product is the "supply." To bring about equilibrium between the demand and the supply is the great aim of production. The consumers ultimately determine the nature and the amount of production. They can restrict the production of a commodity if they limit their demand for it; they can stop its production wholly if they cease to demand it.

Thus the consumers have it in their power to determine what shall be the nature and what the quality of production. The Consumers' League, for example, is an organization composed of members who bind themselves to buy no article which has not on it a printed guarantee that the article has been made under just and sanitary conditions.

It follows from this that the criminality of those producers who turn out products, books, pictures, so-called works of art, that offend against justice, religion, and morality is participated in by those consumers whose demand alone for such products creates for them a profitable market.

Subjects discussed under Consumption. — Under consumption come the three subjects: Expenditure or Spending, Saving, and Investing. After discussing these subjects, a short study will be made of Poverty and its remedies.

II. Spending

Spending here means the giving away of money for objects which serve for our personal consumption. It does not mean buying raw material for manufacture, nor does it mean paying wages.

Spending should steer a midway course between prodigality and avarice. Each person should determine how much he needs for his real wants and those of persons depending on him, and how much he may devote to spending. A certain amount of recreation and pleasure is allowable. If guided by reason and morality, expenditure will be directed to the procuring of those things which will further the perfection of the individual. The individual's perfection will embrace the complete development of heart, mind, and body. This rule will apply to public expenditure as well as to private.

Spending that gives money to more productive industries is economically the better kind of spending.

Means of reducing Expenditure. — Several means are resorted to for the purpose of reducing expenditure. Some of the principal methods are as follows: —

(1) *Living in Common.* — There is no doubt that the expense of living is increased immensely by each family living by itself. There are the separate individual expenses for house, servants, cooking utensils, etc. If several families live together in one house and have servants in common, a common dining room, and meals in common, there must necessarily be a great saving in expenditure. This idea has appealed to Americans as to no other people, and hence the prevalence in this country of the practice of living in hotels and apartment houses where servants

are common to all and where meals are taken in one common dining room.

In this system of living thus in common, there is indeed a curtailing of expenses, but there is the danger of destroying family life, the charm and sanctity of the home, and all the beneficial influences for the moral education of the young that center around the exclusive hearth.

(2) *Coöperative Associations.* — These have for their object the establishment of coöperative stores throughout the country, with capital furnished by the associates, where necessaries and other commodities may be bought at cost or at prices slightly above cost. Goods are bought by the stores at wholesale, and thus a saving is made. If there are profits, they are distributed among those who have contributed the capital.

Coöperative associations are established in great numbers in England and they do an enormous amount of business.

(3) *Building Associations.* — Such associations were first established in Philadelphia in 1835. They have increased rapidly in the United States, until to-day they do a business approximating $600,000,000. Stock is issued to be paid for in small monthly installments. Only stockholders can borrow from the association. The association advances the money required for the building of houses, securing itself by taking mortgages on the houses and the land on which they are built. The borrower pays his installments, which are the equivalent of rent, and after ten or twelve years, he will have paid up the loan advanced him.

These associations furnish a ready means of supplying the money for house building and are a great inducement to the poorer classes to secure their own homes.

Luxury. — Closely connected with the question of spending is the subject of Luxury.

Luxury is defined as "the unreasonable use of things rare and costly" (Antoine, *Cours d'économie sociale*, p. 670), or, again, "the gratification of a superfluous want." (Gide, *Principles of Political Economy*, p. 637.)

Luxury is relative. It depends on times, places, and persons. Some things that were luxuries one hundred years ago have to-day become the mere necessaries of life. What would be a luxury for a poor man may be even necessary for a wealthy man.

Economists are divided on the subject of luxury. Some commend it. Others, more reasonably, condemn it. The reasons for condemning it are: —

1. It makes one selfish and diminishes one's sympathy for the poor and suffering.
2. It engenders greed and the desire for riches.
3. It dissipates capital which might aid in production.
4. It is contrary to the natural law.

Luxury is wastefulness and to be condemned for other reasons besides the extravagant expenditure of money, when it is a waste of labor, the labor being directed not to essentials, but to trifles; when it is procured by grinding poor laborers; when it is indulged in for mere vain display; when it hinders production (witness the extensive parks of English landowners); when it causes degenerates and classes.

III. Saving

Saving means the laying aside of money saved from consumption. Saving is not practiced by savage tribes. It is the result of education and civilization, of forethought which looks into the future and esteems a future advantage or gain to be worth the present sacrifice. Saving means always a sacrifice of some kind.

Conditions for Saving. — The conditions for saving are:

1. One must have something over and above one's daily expenses. It is hard for the poor to save. Still, very often even they can save, if they restrict the expenditures they make for useless or injurious things.

2. There must be the will to save. This condition is most frequently wanting, especially among the great mass of the poorer classes. These live wholly in the present, are incapable

of projecting their thoughts into the future, and hence have no strong motive for imposing on themselves the present sacrifice that saving entails. Education can do much in this matter.

Institutions for Saving. — There are various institutions for saving, such as the state savings banks, the postal savings banks, coöperative societies, building associations, industrial insurance. Those here mentioned have been already dwelt upon.

IV. Investing

Investing is a mode of production. It adds to the wealth of a country. An investment may be made by the holder of money by lending it out to others who carry on production, or by his taking an actual part in production.

Ways of Investing. — The principal ways of investing are in Loans and in Business.

(1) *Loans.* — Money may be loaned to others who wish to engage in business. A certain rate of interest is charged. Security is exacted, and the security may take various forms — a promissory note, a mortgage, or a claim on future salary. Again, money may be invested in government bonds. Such an investment is practically a loan to the government, the security being the government bonds, which pay a certain rate of interest yearly and are redeemable at a certain future date. Money may be invested in railroad bonds. Here a loan is made to the railroads, the security being the bonds of the railroads.

(2) *Business.* — Money may be invested in business, as real estate, commerce, farming, productive industries; or, if one does not personally enter business, he may invest in the stocks of the numerous industrial concerns already engaged in business. These stocks pay a dividend to the stockholders at stated periods. One has but to glance over the financial page of the daily paper to see the list of large business concerns in which money may be profitably invested.

In all this matter of investing, it must be borne in mind that the money invested is consumed by the different concerns in

which it is invested, and herein consists the difference between hoarding and investing. Again, invested money when loaned is spent not by the person to whom the money belongs, but by the persons to whom the money is loaned, and herein consists the difference between investing in loans and spending.

Conditions for Investing. — There are two conditions for investing, — the Security and the Profits.

(1) *Security.* — A prudent man will not invest his money either in loans or in business unless he has some assurance that he will get back not only the same amount of money, but also a surplus in the form of interest, which will pay him for the risk he runs in the investment. He must have security of three kinds, — Political, Legal, and Moral.

Political security is security against revolutions in government, change of dynasty, change of governmental methods in dealing with finance, against oppressive government methods, against foreign embroilments which may result in war. When this political security is destroyed or notably disturbed, new investments cease, and, if possible without great loss, the existing investments are withdrawn. Some years ago the dread of internal disturbances in Russia had the effect of curtailing investments in Russian bonds. In all countries rumors of war will have a very perceptible influence on investments. The fear of a change from the gold to a bimetallic standard in 1893 caused the withdrawal of foreign money invested in American securities.

Legal security is sufficient guarantee that the investor's rights over his invested capital will be safeguarded by the laws, and by those who administer the laws.

Moral security depends on a public morality, a business honesty, a fidelity in keeping engagements, without which all business intercourse must come to an end.

(2) *Profits.* — The second condition for investing is the reaping of some monetary profit from the investment. If nothing were to be gained by putting out one's money in loans and business transactions, money would not be so put out; it would be

hoarded. But the fact that a definite return in the form of interest is made for each dollar invested makes the investment at once profitable and desirable.

The ways open for profitable investment are innumerable. There are, as already mentioned, government bonds, railroad bonds, the shares of industrial concerns. Promoters on every side are constantly making enticing offers of large returns for capital invested in patents, new industries, mines, and business enterprises. Caution, however, is needed in accepting such offers. Close investigation should be made before intrusting one's often hard-earned capital to the ventures that are advertised. It is a safe view to hold that the higher the interest and the more easy and assured the returns, the greater is the risk for the investor. Where one seeks absolute safety, one must be content with small profits.

V. Poverty

Much is being done to-day in the study of poverty, in the investigation of its causes, and the search for remedies. It will be well to look into the question, both for the sake of its economic importance and to learn how it is treated by economic writers.

Explanation of Poverty. — Poverty may be Absolute or Relative. It is absolute when the income is insufficient to obtain the bare necessaries of life. It is relative when the income is sufficient indeed to obtain the bare necessaries of life, but insufficient to secure the ordinary comforts suitable to even the lowest orders of civilized society.

Poverty depends on the relation between income and cost of living. The fundamental items of expense are food, shelter, clothing.

Statisticians in Germany and more recently in the United States (in the Bureau of Labor) have conducted elaborate investigations in this matter, to find out the relation between income and the several items of expenditure. Thousands of

families have been taken for study, and the German statistician, Engel, has been enabled to draw the following conclusions: —

1. The greater the income, the smaller the percentage of outlay for subsistence.

2. The percentage of outlay for clothing is approximately the same whatever the income. This is not confirmed in America, where the more the income, the greater the percentage of outlay for clothing.

3. The percentage for lodging or rent, fuel, and lighting, is approximately the same in all classes. In America it is the same for rent, but not for fuel. The greater the income, the smaller is the percentage of expenditure for fuel.

4. The percentage for outlay for sundries increases with the amount of income.

Booth (*Life and Labour of the People in London*), as a result of his studies in the economic and social conditions of London, found that 30 per cent of the London population were living in poverty. These were poorly sheltered, insufficiently clothed, and underfed.

The results of such a state of things are directly manifested in a higher death average, increased infant mortality, inferiority in the physical condition of the race; the results are indirectly shown in industrial inefficiency of the laborers, degradation of the national character, and hindrance to moral development.

Statistics are wanting in the United States for any similar study. But in general it may be said that the conditions are better here than abroad. Still, if even 15 per cent of the population of the United States are within the limits of poverty, this shows the inability of present methods of civilization to procure the well-being of the elements composing society.

Causes of Poverty. — Among the causes of poverty are named generally, intemperance, habitual indolence, sensuality, gambling, ignorance, shiftlessness, improvidence. Yet permanent poverty cannot be ascribed to these causes alone, for they are usually found in conjunction with general social causes.

Heredity plays a great part in bringing about poverty, and in

many cases poverty may be the result of misfortunes, for which the poor may be in no wise deserving of blame.

In one investigation in an English town, the following were found to be the causes of poverty: —

	%
Death of chief wage earner	15.63
Illness or old age of same	5.11
Irregularity of work	5.14
Size of family	22.16
Regular but insufficient wages	51.96

We find no single reason given as the cause of poverty. Each one will give that cause which touches most nearly the doctrine he upholds. The Malthusian will attribute it to overpopulation; the anarchist to government; the currency reformer to the money system. But poverty existed even when none of these causes was predominant.

Remedies for Poverty.— Attempts have been made and are being made both to relieve poverty and to prevent it; the relief is palliative and curative.

These attempts take the form of Private and Public help.

Private help is Individual or Institutional. Private individual help is generally decried as being usually ill-advised and as perpetuating rather than relieving pauperism. Private institutional relief has brought into existence the numerous organizations and societies which conduct relief in a determinate and definite manner. Such modern institutions are "private hospitals, dispensaries, sanatoria, antituberculosis leagues, improved dwellings and model lodging-house companies, orphan asylums, crèches, kindergartens, juvenile homes, fresh-air funds, retreats for the aged, the convalescent, and the incurable, provident loan societies, employment agencies, wood yards and laundries, industrial colonies, legal aid societies, peoples' palaces, and the like." (Seligman, *Principles of Economics*, p. 592.)

Public relief is given in England through the Poor Law system. In 1601 assessments were made by law for the poor. In 1722

workhouses were built and the poor who would obtain relief were obliged to enter them. By the laws of 1782 and 1796, outdoor work was to be found by the government authorities for the poor. In 1834 outdoor relief was abolished.

In the United States the main public relief consists in the almshouses and in some cases in outdoor relief. Immigration laws strive to prevent the introduction into the country of the indigent who may become public charges.

Is there an adequate remedy against poverty? Is it possible to bring about a state of society where there will exist no poverty and no misery? It is hard to conceive such a state, when one takes account of human frailty, of the mental, moral, and physical inequalities among men, of the fall of the race, of the saying of the Master of all that the poor we shall have always with us, of the future life, of which the present is but a forerunner and a preparation.

Poverty may be relieved in great measure and done away with in great part by leveling up all the grades of society, by charity and justice among men.

Relief of the Unemployed. — It will be found that those who are unable to provide the means of livelihood for themselves, the unemployed, are made up of the following classes: —

1. Those who are physically unable to work.
2. Those who are unwilling to work (the vast majority of criminals are found in this class).
3. Those who are unable to get work.

With regard to the first class, the family should support those of its members who through sickness or injury are unable to provide for themselves. If the family is unable to do so, it becomes the duty of the state to support them.

Preventive means to do away with the idleness of the second class should be taken by the state. If this be neglected, and the members of this class become criminals, the state will then be forced to provide jails, penitentiaries, prisons for their detention, to educate them into usefulness, and to provide sustenance for them during the process of such education. The cost of provid-

ing for the criminal class is enormous, and it would be wise economy for the state to reduce the number of criminals by encouraging the institution of industrial schools, where the poorer classes may be able to acquire a useful trade, through which they may become self-supporting.

The third class, those who are willing and able to work, but who cannot find work, presents a serious difficulty. Some few years ago thousands of Englishmen besieged the English Parliament, clamoring for work and the means to earn a livelihood for themselves and families. In March of the year 1908 an army of unemployed paraded the streets of New York to make public protest of their willingness to work and of the inadequacy of the present social system to supply the means of living to men desirous of every and any kind of occupation that would enable them to ward off starvation. Coxie's army of unemployed invaded Washington, in 1894, with a similar purpose. In times of business depression such occurrences are likely to happen. In times of prosperity there is usually ample demand for all the labor on the market.

It may be asked how far the government is obliged to come to the aid of this third class of unemployed. Is the government obliged to furnish them employment? If it does not furnish them employment, is it obliged to give the necessaries of life to this class?

No doubt the state must aid in cases of extreme need and prevent the starvation of its members, but it is a dangerous thing to lead the mass of the people to rely on the government to provide for its necessities. It has come to be received as an axiom that "the number of dependents tends to increase in direct ratio to the aid they count upon receiving." Once the government begins to inaugurate measures for public relief, there grows up among the people a feeling of dependence and reliance on government; the spirit of self-dependence and self-reliance is destroyed; a premium is placed on improvidence; the dependent classes gradually increase and look to government aid in every species of necessity; and, finally, the productive, en-

ergetic, active classes of society are made to bear the burden of supporting the improvident.

Negative and preventive measures are better than direct aid. The government should by prudent legislation correct the evils existing in the social system, — business combinations, monetary methods, etc., — which are the direct or indirect causes of business depression and the forced idleness of the masses; it should offer every encouragement to provident and resourceful efforts on the part of the working classes to secure means to tide over periods of nonemployment; it should offer facilities for the increase of savings institutions, such as postal savings banks, building associations, and industrial insurance companies; it should lend its sanction to organizations among the masses for beneficial purposes, so that the working classes may have something to live on during times of idleness; it should introduce compulsory insurance of employees by employers.

These and similar measures would tend to prevent the evil of poverty and helplessness in which at times the laboring classes are thrown, and would at the same time obviate the sinister effects of paternalism.

QUESTIONS

1. What is consumption? How is it divided?
2. What relation exists between consumption and production?
3. What is spending? What principles should influence spending?
4. What means are suggested to reduce expenditure? Explain each of the means proposed.
5. What is luxury? Why should it be condemned?
6. What is saving? What are the conditions for saving? Give examples.
7. What are the principal ways of investing? Mention and explain the conditions for investing.
8. What is poverty? What are the causes of poverty? What remedies for poverty are proposed?
9. What is the nature of the relief that should be extended to the different classes of the unemployed?

CHAPTER XXI

DISTRIBUTION. RENT. INTEREST

I. Distribution

Explanation. — Distribution is the third part of Political Economy. The object of this part of Political Economy is to study the principles that determine how the product of Nature, Labor, and Capital, or its equivalent in money value, is to be distributed among the various agents which help in its creation.

An immense amount of concrete product is the result of the various forces, Nature, Labor, Capital, treated of in the first part of Political Economy, Production. This product has value estimated in money. The purpose now is to consider how the product shall be distributed, what share of it shall come to the individual factors which have, by collective energy, helped in its production.

This subject constitutes the great social question.

That there is a social question at all is denied by writers of the Liberal School, who hold that if everything is left absolutely alone, matters will settle themselves according to strict justice and according to the infallible operation of laws as inflexible and as certain of result as are the laws of nature. They say that there should be no attempt to determine methods of distribution, and that it is idle to speculate on how distribution shall be accomplished. How commodities may be produced, how they can be produced at least cost, and how placed where they may bring in the greatest returns, these are questions which properly come under the investigation of Political Economy, but Political Economy should go no further. The proceeds from the produce, they claim, will distribute themselves naturally, just

as the waters of a river, debouching into a plain, will find their own level and will contrive their own exits. So, Adam Smith did not treat of distribution at all, limiting his study to production alone.

Yet the question of distribution has in recent years come to be considered a practical question. It is, according to most writers, the great social question upon the solution of which depends the welfare of the individual members of society. It is claimed that, while production is increasing year by year and the world is annually becoming richer, the social standing of most of the members of society is not becoming appreciably better, or at least not in proportion to the increase of wealth. The evil is not in methods of production, but in the methods of distribution of the immense wealth brought into existence by production.

The amassing of great wealth, it is declared, is due to causes often unjust and tyrannical. They are thus enumerated: the sword, slave trade, political power, foreign trade, inventions, mercantile skill, monopolies, enterprise in real estate, gambling, immense charges for professional services, extortion in trade, usury. Through such causes, many of them unjust, wealth has been concentrated in the hands of the comparatively few, and the great majority of the people are left outside the reach of the benefits that accrue from an ever increasing quantity of production and an ever advancing facility in the means of production.

From the unequal distribution of the wealth produced have arisen the diversity of classes in society, one antagonistic to another, and the inequality of social conditions.

So has it been in the past, and so is it to-day. In ancient Greece, there were the helots and the upper classes; in Rome, there were the patricians, the plebeians, and the slaves; in the Middle Ages, there were the feudal lords and the serfs. In Russia, what abject degradation still obtains! In Europe, to-day, there exist the nobility and the populace. In our own land, we have the rich and the poor.

All this inequality, this distinction of classes, it is claimed, is due to the unequal and frequently unjust distribution of wealth.

Much is said about the equality of men. We hear from many quarters the saying: "All men are by nature equal;" and we are told to believe that any difference of social condition, any supereminence in ability or in the possession of the world's goods, violates this fundamental principle of the natural equality of men, and must have arisen from social or personal causes necessarily unjust.

The Catholic View. — We must not, however, fail to keep in mind the fundamental principles of Catholic doctrine, which directly or indirectly pertain to this matter.

It is true that, according to nature taken in the abstract, all men are equal, *i.e.* all men have the same nature. All have the same Creator, the same destiny and end, the same natural law. All are members of the same family. All have the same essential rights and duties arising from the natural law. All have the right to be treated as men. All have a right to the essential conditions of existence, that is, the right to acquire food, raiment, lodging, to possess property, to dispose of their possessions and services as they please, provided they offend in no way against the rights of others.

But it cannot rightly be claimed that in the concrete all men are by nature equal. Men differ in physical and mental powers, in qualities inherited and acquired through education and under influence of environment, in judgment of things, in that ability which makes for success in the world, in the fortunate surroundings which apparently through mere chance affect their lives, and in the power to turn their surroundings to good account. The causes being so varied, the results must be equally varied, and there will always be the remarkably successful man alongside of the man who wins success but in small measure and after much labor, and the man who seems fated to absolute failure.

Nor do these varieties of inherent abilities, nor the social

differences due to them and to fortuitous circumstances ably profited by, militate against the only true kind of natural equality that can be asserted of all men, — equality in the abstract. Had nature intended that all men should be equal in the concrete, nature would have given to all men equally the same health, the same natural dispositions, the same mental abilities, the same tenacity of purpose, the same moral qualities.

Moreover, man is in a fallen state. He had been raised to a supernatural order, and through the sin of the first parents, he has fallen from his high estate and has become subject to death, to suffering, to misery, and to labor. This is no mere speculation. It is the truth made known to us by Revelation. Man's life on this earth is short. He is destined to a future life, to a life eternal. This present life is not the be-all and the end-all of man. Another era will open up to him, and that era will bring about the perfection of his being, which cannot be gained in this life.

Hence, evils may exist in this world, injustice and oppression may go on, and the equilibration of things may never take place here; the wicked may prosper and the honest and the just may be oppressed, and no adequate remedy may appear; yet the moment of compensation, of perfect justice, will come, if not in this life, then in the life of eternity.

The efforts that are being exerted to correct the patent evils of society are being made usually without any consideration of these absolutely certain truths. Theories are advanced, systems are proposed, for the amelioration of mankind, in the false assumption that the supernatural does not exist, that man has within himself all that is needed for his own perfectibility, that this world is the final term of man's being.

These theories ignore the fall of man, the supernatural order to which man has been raised, the supernatural means requisite under the present order, the Providence of God, the future life where a final settlement must be made.

The efforts being exerted by all such theorizers for the better-

ment of man must infallibly prove abortive, because, building upon false assumptions, they ignore the fundamental truths of the human race and world conditions.

No doubt much has been done and much more can be done for the relief of existing evils through natural efforts and with natural means, but to hope to attain by such means alone perfect happiness for all men in this life is a vain chimera, and must be so, if Revelation is not a myth.

It would be well for us to hearken to the words of Leo XIII: "To suffer and to endure is the lot of humanity; let them strive as they may, no strength and no artifice will ever succeed in banishing from human life the ills and troubles which beset it. If any there are who pretend differently — who hold out to a hard-pressed people the boon of freedom from pain and trouble, an undisturbed repose, and constant enjoyment — they delude the people and impose upon them, and their lying promises will only one day bring forth evils worse than the present." (Encycl. *Rerum Novarum.*)

Socialist Solution of the Problem of Distribution. — In treating of Socialism in a preceding page, the reader was referred to this third part of Economics for a view of the methods of distribution advocated by the Socialists. It is well to give at least a cursory glance at the principal views which have been set forth at various times by Socialist teachers. (Cf. Gide, *Principles of Political Economy*, p. 454; Cathrein-Gettelmann, *Socialism*, p. 316.)

The principles which, according to Socialists, should govern distribution may all be summed up in the following formulas: —

(1) Every one should receive an equal share of the social product. (2) Every one should receive according to his wants. (3) Every one should receive according to his merits or capacities. (4) Every one should receive according to his labor.

(1) *Equal Sharing.* — "Every one should receive an equal share of the social product." Equal sharing was practiced among some ancient societies. The Romans divided the land,

giving an equal share to each family, and when inequality in possessions supervened, another division was made. But it must be noticed that in those ancient times the principal item of wealth was land. To-day land constitutes but a fraction of the wealth owned by individuals in society. If land were the only item of wealth, equal sharing might to-day be possible, from a mere physical point of view, but with wealth made up of countless other items as it is to-day, the problem of distribution by equal sharing becomes an impossibility.

The principles upon which the Socialists found their claim to equal sharing are : —

1. There is enough wealth in the world to satisfy the wants of all the members of society.

2. Whatever wealth has been amassed has been so amassed owing to the beneficent conditions arising from the mechanism of society. But each individual of society has been instrumental in establishing and preserving these conditions. The individuals, therefore, ought all to share in the general good — the wealth amassed in society.

3. The fact that unequal possession of the wealth of society exists is due to no natural causes, but to causes wholly artificial, to spoliation of the poor by the rich. Equilibrium must be re-established by expropriation, according to the revolutionary Socialists, by progressive taxation, according to the more moderate element.

As a matter of fact, the rich constitute in all countries but a small minority of the whole people. In the United States, according to Thos. G. Shearman, —

1.4 per cent of the population own 70 per cent of the wealth,
9.2 per cent of the population own 12 per cent of the wealth,
89.4 per cent of the population own 18 per cent of the wealth.

According to Holmes, an expert, —

0.03 per cent of the population own 20 per cent of the wealth,
8.97 per cent of the population own 51 per cent of the wealth,
91.00 per cent of the population own 29 per cent of the wealth.

In the British Isles six million families, or over three fourths of the people of Great Britain and Ireland, have no registered property.

It may be well to consider what would actually be the result if equal sharing were put in practice.

If, for illustration, we take the census valuation of real and personal property in the United States for 1890, we find that the total wealth equaled $65,000,000,000, of which the following were the most important items: —

Real estate, with improvements	$35,000,000,000
Live stock on farms, farm implements, and machinery	2,700,000,000
Mines and quarries and stock on hand	1,300,000,000
Gold and silver coin and bullion	1,100,000,000
Machinery in mills and product on hand	3,000,000,000
Railroads and equipments and street railways	9,700,000,000
Telegraph, telephone, shipping, and canals	700,000,000

Divide this total amount by the population of 1890, and the per capita wealth will be $1038. Each family (average at that time = 4.8 persons) would have for its share $4982, if the national wealth were equally distributed to families in 1890. Of this amount, $2683 would be in real estate, and $84 in coin.

Again, in 1890, the national income was $10,800,000,000, which would give $172 to each member of society, or $827 to each family.

The per capita wealth of France in 1890 was $1025. In other countries, in 1895, according to R. E. May: —

	Wealth per cap.	Income per cap.
United Kingdom	$1,548	$184
Germany	799	126
Russia	313	49
Austria	533	85
Italy	518	71
Spain	692	79
Australia	1,312	262

With equal distribution, therefore, many families and individuals would be better off than they are at present. But such a scheme would be attended by insuperable difficulties. It would be impossible to calculate with any degree of exactness the total product of a year's industry. Any figures that represent a country's wealth are at best but approximate estimates. Hence, it would be impossible to know exactly what ought to be the share of the individual in this system of equal sharing. Again, it would be manifestly absurd to make all equal sharers in a product to which many through idleness and unskillfulness had contributed nothing.

Equal sharing would bring about unjust expropriation of property, the destruction of all personal incentive to production, an appeal to violence.

(2) *Sharing according to Wants.* — "Every one should receive according to his wants." The proposal is that common stores are to receive all the outcome of production, and to these all the members of society may repair and from the common stock satisfy all their wants.

This idea is founded on the assumption that the amount of wealth produced is sufficient to satisfy the wants of men. But if the amount of wealth is actually sufficient to satisfy the moderate and restricted wants of all the members of society, there would surely not be sufficient to satisfy the wants of men under a communistic régime, for it is a well-established fact that wants increase with the facility with which they can be satisfied.

In such an order of things, there would be no authority to regulate wants. Mutual concessions, the exercise of kindly good will, and the feeling of fellowship would alone determine distribution. The absurdity and the utter impracticability of such a method must appeal at once to any one who knows human nature.

(3) *Sharing according to Merits or Capacities.* — "Every one should receive according to his merits or capacities." The idea is chimerical. It supposes a state of society in which

human frailties and human passions would not exist. It supposes that every member of society is possessed of honest zeal to do his utmost possible share of the general industrial labor, that an adequate and impartial supervision is possible whereby each one's endeavor may be justly estimated, and that every one will peacefully submit to the allotment that may be given him.

(4) *Sharing according to Labor.* — "Every one should receive according to his labor." All the instruments of production, capital and land, belonging to the nation, the proceeds of production are to be turned into the national treasury. After the national expenses are paid, the remainder is to be distributed among the producers, according to the labor each one has contributed.

The principle is open to many difficulties. In every kind of society, there must be many individuals who are not actually employed in industrial labor. Such are teachers, judges, public officials, and many others. There would have to be some norm by which their services to the state or the community could be estimated in terms of labor. In regard to labor itself, is it to be measured by the time devoted to labor, the labor-time, or by the amount and kind of productive effort made, or by the actual product turned out by labor?

The principle is founded on the false assumption that labor is the standard of all values, that a commodity will have value only dependent on the amount of labor required to produce it. Value, as we have seen, depends on the property possessed by a product to satisfy a want and the desire men have for that product.

Coöperation. — It is thought by some that the evils existing under the present methods of distribution may be remedied without any recourse to the Socialist systems, by means of coöperation.

This system embraces all forms of coöperative societies, such as Consumers' Societies, Credit Associations, Productive Associations. The system does not do away with private property,

nor has it any of the objectionable features attaching to Socialism. It can scarcely be called a system. It is the effort on the part of groups of individuals banded together to render living cheaper, to do away in part with competition, to distribute more generally the profits accruing from production, to offer more easy means for the obtaining of capital. Some of these coöperative associations have already been discussed, and there will be occasion to discuss other forms of this system at a later period.

The Catholic School. — Followers of the Catholic School do not deny that much of the evil existing in society is due to defective methods of distribution at present in force. But they suggest no such drastic changes as do the Socialists, nor would they do away with existing social institutions.

They advocate amelioration of the social evils through state interference, through wise legislation affecting inheritance, taxes, contracts, land rent, hours of labor, wages. They propose the uplifting of the working classes through the formation of associations and unions for their mutual protection and help. They appeal to the influence of the Church's teaching and the power of Christian doctrine to bring about a spirit of charity and justice in the mutual dealings of capitalists and laborers, and a recognition on the part of the employer of the dignity of the man who labors for him and of his right to a reasonable and just share of the wealth produced.

Parties to Distribution. — The several parties among whom distribution of the returns of production is made are variously classified by different authors. The more generally received classification is that of

The Landlord, who receives rent for the use of his land;

The Capitalist, who receives interest on the capital furnished;

The Employer, who receives what is technically called profits;

The Laborer, who receives wages.

We shall study each of these shares in the proceeds of production, Rent, Interest, Profits, and Wages, and seek out the principles that determine their distribution. Rent and interest

are considered in the remainder of this chapter; profits and wages in later chapters.

II. Rent

Definition. — Rent has a more exact meaning in economics than in the popular sense. In the popular sense, rent means the amount paid by the lessee of a house, a flat, a room, or a business building. In economics, rent bears relation to land, and means the revenue derived from the use of land and of the forces inherent in land. It is "the payment which an owner receives for the use of natural agents." (Laughlin, *Political Economy*, p. 264.) Walker defines it as "the remuneration received by the landowning class for the use of the native and indestructible powers of the soil, or for the use of natural agents." (*Political Economy*, p. 193.)

"Natural agents include land, whether arable or timber land, mineral deposits, water power, or land peculiarly situated for building purposes." (Laughlin, *Political Economy*, p. 264.)

"The rent of land is that portion of the revenue of the land that is paid the owner for the right to exploit the natural forces of the soil.

"Rent can again be defined as that part of the returns from the land which corresponds to the productive power of the land. If you subtract from the product of the land the interest of the capital and the wages, the remainder will represent the rent. Product equals Interest, plus Wages, plus Rent; hence, Rent equals Product minus Interest, minus Wages. Whence it follows that there will be rent as often as the value of the product surpasses the cost of production. A piece of land will bring in no rent, whenever the value of the product is absorbed by the cost of running the land.

"Rent, as it has been explained, may be called absolute rent. It exists independently of all comparison with lands possessing superior or inferior qualities. Relative rent is the special profit from the fertility of good lands, an advantage resulting from the superior quality of the lands and surpassing the medium or

the lowest rate of revenue from land." (Antoine, *Cours d'économie sociale*, p. 517.)

For illustration, take a farm of fifty acres. It produces something when labor and capital are put into it. The factors of production are land, labor, and capital. Here we have land, meaning the soil itself and the productivity of the soil. Several laborers are employed in working the land — this is the labor. A certain amount of money is invested in buying plows, harrows, spades, seed, fertilizer, etc. — this is the capital.

The three factors produce so many bushels of grain, of vegetables, of fruit, etc. This product may be estimated in money. It is worth $1000, $2000, $3000.

This money may be apportioned among the several factors. The labor is paid — this is wages. The capital must be paid for its use — this is interest. Five hundred dollars may be the amount of the wages which goes to the labor factor. Two hundred dollars may be the amount of the interest which goes to the capital. What remains of the product is the result of the inherent and indestructible forces of the soil, the productivity of the soil. This is the rent. These inherent forces have been at work in producing the grain, the vegetables, the fruit, etc. They could not act without labor and capital. But with labor and capital they do produce, and the more skilled the labor and the more wisely directed the capital, the more effective will be these inherent forces of the soil, and the greater and more valuable will be the final product.

It may happen that the farmer who works a farm is also the landlord, the owner of the land. In that case the farmer may be conceived from two aspects, — he is the farmer who invests his labor and his capital, and as such he receives his interest on his investment and his wages; and he is also the owner, and as such he receives the surplus over the expenses and interest, the rent. The principle is not affected, whether the farmer pays the rent to himself or to another.

The owner of the land has a right to the portion of the product called rent. He owns the land, and he owns it with all the in-

herent forces contained in it. He owns the cause and he owns the effect. *Res fructificat domino.*

This principle applies to business lots, to mines, and to all natural agencies.

It is to be noticed that rent does not affect the price of agricultural products. The price of wheat, corn, oats, etc., is determined by the demand for these products. This price affects cultivation, and when it rises, it causes lands less fertile and less favorably situated to be brought under cultivation. The raised price permits these inferior lands to become rent-paying lands, and proportionately increases the returns, thus increasing the rent, of lands possessed of greater fertility. Rent is thus the result of increased demand for produce, which demand causes a rise in the price of the produce. Rent, therefore, is not the cause of the high prices of foodstuffs. Hence the accusation that the large rents received by landlords are the cause of the rise in prices of farm products is unjustifiable. The cause of such a rise must be sought elsewhere.

Ricardo's Theory of Rent. — Ricardo's theory is founded on the law of diminishing returns. Land is limited in amount and in fertility. Every increase of labor and capital applied to land will increase the returns from the land, but after a certain period is reached, the returns will become gradually less proportionately to the outlay, until all profit will cease.

The various forces which lead up to rent are (1) an increase of population; (2) demand for more food; (3) more extensive cultivation of land, or more intensive cultivation of the same land, setting up a classification of land into different grades, according to the productivity of the different grades. When such a situation exists, rent comes into existence.

Lands are classified in different grades according to the net profit received from the product of the lands. Two strips of land although having the same area will vary in the returns. This may arise, first, from the fact that differently paying articles are produced by the two lands, a tobacco crop, for example, paying more than a wheat crop.

It may arise, secondly, from the varying fertility of the two lands. States, counties, farms, differ in fertility. The factors which aid fertility, slope, exposure to sun, watershed, drainage, rainfall, constituents of soil, are not possessed equally by all lands. Hence, some lands will be classed as superior, others as inferior.

Thirdly, lands which are equally fertile will sum up different net returns according to the situation of the lands with regard to the markets. The expense of transportation must be taken into account, and the land farthest removed from the market and requiring a greater transportation cost for bringing its produce to market will be ranked inferior to another land which is more favorably situated and requires smaller transportation cost. That lands may be classed in different grades, as superior and inferior, must now be evident.

We saw before, in studying the price of commodities, that the price will be determined by the lowest or the highest cost of production, according to whether the commodity can or cannot be produced at the will of the producer. We saw that hammers, for example, would have their price determined by the lowest cost of production, because no limit need be fixed to the amount of hammers turned out. They may be manufactured at the will of the producer.

We saw also that the natural products, the cereals, wheat, corn, oats, rye, will have their price determined by the highest cost of production, because these products are fixed in amount at the end of the growing season and cannot be increased at the will of the producer.

The market price of the cereals, therefore, will be such a price as to cover the greatest cost of production, will be such a price as to enable the most inferior lands, which demand for food brings into cultivation, to reap a paying return. If such a price did not prevail, the inferior lands would not be cultivated, and the supply of foodstuffs would be diminished. The demand would raise the price of the diminished supply, and the inferior lands would be again cultivated and reap a profit.

The price of land products is, therefore, fixed by the highest cost of production. It is fixed by the poorest lands which the demand for such products brings under cultivation. It is the same for the whole country.

Now, let us suppose that we have four different parcels of land all under cultivation at the same time and producing for the same market. Equal amounts of capital and labor are expended on the several pieces of land. These farms bring in different net returns, owing to different degrees of fertility or different locations with respect to the market. The net returns for the several farms will be definite sums, differing one from another and rising from a minimum to a maximum.

The net returns must pay first of all the expenses of labor and capital, *i.e.* wages for the laborers and a reasonable interest on the invested capital. Whatever is over and above these expenses for labor and capital is called rent, and is the portion of the landlord or owner.

It may be possible that the most inferior farm, the poorest land, will bring in as net returns only just enough to pay the expenses of labor and capital. This land will be called rightly no-rent land. It is also called the margin of cultivation. It may be cultivated by the owner for the reason that it pays expenses to cultivate it. It furnishes interest on the capital invested perhaps equal to the interest to be derived from any other business investment. It may be leased by the owner for a nominal rent, in order that the farm may not be idle and the houses may be kept in repair.

All the farms above this poorest, no-rent land will bring in a certain amount of rent differing according to the degree of superiority of the lands. The rent in each case will be the excess of the net returns over what is required to pay wages and a reasonable interest.

From all the above may be derived the Law of Rent: —

1. Rent arises out of the differences existing in the productiveness of different soils under cultivation at the same time for the purpose of supplying the same market.

2. The amount of rent is determined by the degree of those differences.

The principle governing rent, as just explained, was stated clearly by Ricardo, and it is called Ricardo's law.

Ricardo's law of rent can be illustrated as follows: —

Farms	*A*	*B*	*C*	*D*
Product — bushels	240	180	120	60
Returns	$240	$180	$120	$60

Capital and labor — the same for each farm.
Market price — $1 a bushel.

Let *A*, *B*, *C*, *D* represent four farms of different fertility and productiveness signified by the figures 240, 180, 120, 60, indicating the number of bushels supplied respectively by the farms. A certain amount of capital and labor, the same for each farm, is expended on the farms. A definite return must be made by the produce to pay expenses and interest on the capital invested. The actual returns that would be made by the above farms with the produce at one dollar a bushel would be *A* = $240; *B* = $180; *C* = $120; and *D* = $60.

Now, let us suppose that $240 is the sum required to pay expenses and interest. Then, *A* would be no-rent land, and *B*, *C*, *D* would not be cultivated at all, because they would not pay expenses and interest.

This state of things will last, while the *A* lands are able to supply the demand for the product. But let there be an increase of population to such an extent that the *A* lands cannot supply the demand. Then, the demand increasing and the supply remaining the same, the price will rise. The demand must be supplied. Other lands will be brought under cultivation. The *B* land will be cultivated. But the *B* land must return at least $240, since that is necessary to pay expenses and interest. Hence the 180 bushels, the produce of the *B* land, must bring in $240, *i.e.* the product must sell for $1.34 a bushel in the market. The increased demand will cause the price to rise from $1 to $1.34. Now the *B* land will pay for its cultivation, but it will be no-rent land, and *C* and *D* will not be cultivated.

In the meantime, the *A* land, because of the rise in price of the product, will bring in a return of $320. Of this, $240 will go to pay expenses and interest as before, and the surplus, $80, will be rent, and will be paid as rent to the owner of the land, to the landlord.

If the population should again increase and the demand become greater, the price of the product may rise to $2 a bushel. Then the *C* land would become the margin of cultivation and would be the no-rent land, while *A* would return $480, and *B* would return $360. Now, subtracting the original $240, *A* would pay a rent of $240, and *B* would pay a rent of $120.

Should the same factors work further and bring the price of the product per bushel to $4, the *D* land would be cultivated and the rents paid by *A*, *B*, *C* would be respectively $720, $480, and $240.

If there were another land, E, giving 300 bushels and therefore more fertile than *A*, *B*, *C*, *D*, but situated at a distance from the market where the produce of *A*, *B*, *C*, *D* is sold, the cost of transportation must be taken into account and deducted from the value of the produce of the *E* land, thus bringing it down to a level with the *A* land or possibly with the *B* land or the *C* land.

If, instead of extensive cultivation, as in the illustration, intensive cultivation be employed, the same principles will hold, but the *A*, *B*, *C*, *D* will represent, instead of different farms or lands, the additions of labor and capital put into the first land.

The statement of Ricardo's law of rent will now be understood if expressed as follows: The rent of any piece of land is the excess of its produce over the produce of that land which just repays the current rewards for the sacrifices of production.

The forces which work against the actual carrying out of the law as stated are: —

(1) Any improvements in cultivation, in machinery, in intelligence, in chemical knowledge of the soil, in methods of transportation, — all of which check the law of diminishing returns.

(2) Competition of new lands.

Ricardo's explanation of rent is theoretic. It is in great measure fanciful and contrary to facts, as the best lands are not the lands first cultivated. It supposes perfect competition, and that no personal or social considerations have influence on the working out of the theory. Such conditions are very hard to find in the actual world. They are, however, found approximately in the United States.

In England, public sentiment favors the tenant class. The same man is often the tenant for years. The landlord shows much consideration for the tenant. In countries on the continent, custom determines the rent in great measure. In Ireland, owing to past tyranny on the part of England, the tenants are often found to be ignorant, degraded, and improvident, and there is little friendly sentiment in favor of the tenant.

Ricardo's law is made to apply also to the rent of building lots. It applies to mines, but only in part, as increased compensation must be made because the mines will be exhausted in time.

III. Interest

Definition. — Interest is that portion of the product which is given to the capitalist. The capitalist is one who invests capital in business or loans it out to others who are engaged in business.

The capitalist may be at once the person who invests his money in some business concern and the person who manages the business. In that case, we must distinguish two different kinds of returns which the business brings in, the profits which that person receives as manager of the concern, and the interest which the same person receives as a capitalist. If the manager borrowed his capital, the distinction would be clear.

We are considering here only that part of the returns which goes as interest to the capitalist.

Capital, as we saw before, is defined as that part of wealth which is devoted to the production of more wealth.

Interest is the compensation paid for the use of capital.

Historical Sketch. — Until comparatively recent times, no clear distinction was made between interest and usury. The terms were identical in meaning.

Interest, as signifying in general the compensation due to the lender for the use of money loaned, was known in the most ancient times, and it was generally condemned. The ancient philosophers, Plato, Aristotle, Cato, Seneca, Plutarch, condemned it. (Cathrein, *Moralphilosophie*, 1899, II, p. 350.)

It was condemned by the Scriptures. (Deut. xxiii, 19, 20; Ps. xiv, 5; Luke vi, 35.) The Fathers of the Church inveighed against it, and they appealed to the authority of the Scriptures.

The Church has pronounced against interest taking from the most ancient times down to the beginning of the nineteenth century.

Some of the earlier Synods and Councils forbade the taking of interest by all clerics, and pronounced severe penalties against such as were guilty. (See Hefele, *Conciles de l'Eglise.* — Elvira, 300 [can. 20]; Arles, 314 [can. 12]; Nicea, 325 [can. 17]; Orleans, 538 [can. 27]; "In Trullo," 692.)

Later Councils (two English Councils, 787; Aix-la-Chapelle, 789) condemned interest taking among lay persons, and throughout the following years different Councils and Popes denounced and prohibited the practice among all classes of the faithful. (Vienna, 1311; Lateran V, 1515; Alexander VII, 1665; Innocent XI, 1679. — Denzinger, *Enchiridion*, Nos. 407, 623, 1013, 1058, 1059.)

The canonists and theologians, as a rule, decried the taking of interest. The general opinion may be found contained in St. Thomas (*Summa*, 2–2, q. 78. a.1), who argued that, when money is loaned, it is consumed in the use made of it, and if more were exacted for a sum of money loaned than the sum itself, gain would be made out of both the thing itself and the use of the thing, and injustice would be done. He declared that money is a thing in which no distinction is to be made between the thing itself and the use that is made of it. It is like wine

or corn or any other consumable thing. To require compensation for the use of money would be similar to requiring one payment for a gallon of wine or a bushel of corn and another added payment for the use or consumption of the wine or corn. Justice in contracts required that values given in exchange should be equal. It would be unjust to demand a return of more than the loan.

It was, however, admitted by all writers of this time and by the Church herself, that there existed certain extrinsic circumstances which justified the taking of interest. Such extrinsic circumstances were: —

1. The deprivation on the part of the lender of the use of the money while it was out on loan.

2. The positive loss to which the lender might at times be subjected by the loan he had made.

3. The danger to which the lender was exposed of not recovering his money.

4. Delay in returning the loan.

These circumstances, all extrinsic to the loan, were titles that justified the acceptance of interest.

But interest in itself and by reason of the loan itself and independent of all external circumstances was condemned as unjust by the moralists and almost universally decried.

Some have thought that the Church opposed interest because money loans were made to the poor and needy for purposes of consumption only, and declared that when money was loaned for production, interest was not unlawful. But opposed to this view is the fact that Benedict XIV, in his famous Encyclical *Vix pervenit* (1745), explicitly declared that interest taking (*vi mutui*) was forbidden, even when the money was loaned to the rich and was to be employed for the sake of gain in commercial transactions. (Denzinger, *Enchiridion*, Nos. 1318, 1319. Cf. Walter, "Wucher und Zins," in *Staats Lexicon*, pp. 1376, 1396. Cf. also Cathrein, *Moralphilosophie*, II, p. 358, No. 5.)

There can scarcely be any doubt that in a certain limited

sense loans were sought for productive purposes, even while there existed the stringent ecclesiastical opposition to interest, especially during the later period of such opposition. Nor were there wanting means by which money could then be loaned at interest as it is to-day. There were always the extrinsic titles already mentioned that justified the acceptance of interest, and these titles could practically always be found in any actual loan.

Various other devices were resorted to which were thought to justify the taking of interest. Thus, money was loaned for a definite time but not reclaimed until some period subsequent to maturity, and interest was charged for the delay. Again, he who made the loan for business was conceived to become a partner of the borrower, and thus had a right to a surplus over his loan. In other instances, the title was conceived to lie in the presumption that money in hand was worth more than money to be received at a future time, and hence interest was justifiable for a loan that deprived the lender of a present sum of money. Still further, interest was claimed on the ground of the gratitude the borrower felt or should feel for the money loaned. (Cf. Lehmkuhl, *Theologia Moralis*, I.)

Several of the devices resorted to were condemned by some of the Popes. (Alexander VII, 1665; Innocent XI, 1679. Denzinger, *Enchiridion*, 1013, 1058, 1059.)

The concept of the productivity of money as capital was not, however, generally grasped during the Middle Ages. And, indeed, the use of capital as a productive agent in any universal sense dates from about the beginning of the nineteenth century, when machinery came into general use, and individual industries began to be replaced by large capitalistic industries.

Economic conditions were not the same in past times as they are to-day. Money was not recognized generally as a factor in production. It was conceived in itself and without relation to labor or nature's materials and forces, and as such it was a mere fungible thing consumed in use. Money played but a comparatively small part in production. It served mostly to

provide for consumptive purposes. Labor and nature were the recognized sources of production. Only in exceptional cases was money employed in a productive sense.

Civil authority first authorized interest in Bavaria, Germany, in 1553, and later, in 1654, it was allowed by law throughout all the German States. In 1787, in Austria, the laws granted freedom with regard to the rate of interest. In France, a law was passed in 1789 allowing interest. (Walter, "Wucher und Zins," in *Staats Lexicon*, p. 1384.)

In the beginning of the nineteenth century there were found theologians who endeavored to prove that interest taking was not in itself unjust. They did so in spite of the array of high authorities of past times who had almost unanimously declared it unjust.

These writers showed that interest had been condemned in the past through a wrong concept of money, and they demonstrated the new concept that should be held of it as a productive factor, which rendered the taking of interest wholly justifiable. They already saw the truth of the matter, as it has been generally received in modern times.

In 1830, Pope Pius VIII was appealed to by a bishop of France to decide the question of interest, which caused dissensions and troubles among the faithful. This appeal and others that followed brought out the decisions of Pope Pius VIII, and later (1831) of the Congregation of the Holy Office, and still later (1838) of the Inquisition, allowing the practice of interest taking. (Cathrein, *Moralphilosophie*, II, p. 351.)

From about the beginning of the nineteenth century, the economic principle of interest became firmly established, and it is to-day received as one of the self-evident factors in commercial life.

Consideration of the Attitude of the Church with Regard to Interest. — Some would defend the Church and excuse her attitude towards interest on the ground that in her condemnation of interest she intended only to condemn usury. They would contend also that the condemnation of the Scriptures had ref-

erence only to usury. Such, however, is not the stand taken by the more prominent apologists of the Church.

In the opinion of the latter, it seems more consonant with facts to admit that the general consensus of opinion of the Church, the Fathers, and the theologians of past times practically made no distinction between interest and usury, and that they universally condemned the making of any gain by reason of a loan, when the loan was considered in itself and without any extrinsic justifying circumstances. (Cf. Cathrein, *Moralphilosophie*, II, p. 350 *et seq.* A. Koch, "Zins und Wucher," in *Kirchen Lexicon*, p. 1968.)

The attitude of past ages with regard to interest depended on the view universally held of money. Money was conceived merely as a medium of exchange and a measure of value. When considered by itself, it has that meaning even to-day. It is only when it is put into the hands of the merchant, only when it is joined to the two other factors of production, nature and labor, that it becomes a productive agent. If left to itself, it is unproductive and can never add one jot of increase to its value.

In the view of past ages, money had for its proper and principal use merely consumption. It was employed for the buying of food, of clothing, of equipments which did not enter into production.

The borrowers of the old Roman time were the poor plebeians who borrowed from the rich patricians to buy food; the borrowers of the Middle Ages were the penniless knights who asked loans to equip themselves for the Crusades, and the poorer classes of the people who needed the loans for their sustenance. At all times, the loans were for unproductive consumption.

Interest taking was used as a means of making profit out of the poor and needy. When the loans became due, the borrowers had frequently nothing to offer but their persons and their labor and their property. As a result, they became the slaves of the creditors or they were despoiled of their property. The prevalence of usurious practices in the Middle Ages and the ruin

they brought on the poor are matters of history. The rights of personal liberty and the rights of property were destroyed.

It was to aid the poorer classes of the people, who, when in need, were obliged to pay for loans 50 and 60 per cent to the usurers, that several of the Popes of the Middle Ages gave their sanction to the Montes Pietatis, instituted by the Franciscans throughout Italy during the fifteenth and sixteenth centuries (beginning 1462). These institutions enabled the needy to secure the necessary loans without paying the exorbitant rates demanded by the money lenders. They were allowed to exact a moderate sum by way of indemnity and to cover the expenses incurred in their management. (Cf. Denzinger, *Enchiridion*, No. 624. Cf. P. Heribert Holzapfel, O. F. M., *Die Anfänge der Montes Pietatis.*)

It is the glory of the Church that she stood opposed to the exorbitant gains that were wrung by the lenders of money from the needs of the people. When money loans led to evils that affected the whole of society, it is not strange to find all the Church's forces arrayed against the practice of loaning money for interest. It is not strange to see the Church's theologians strenuously condemning the evil. As they reasoned, a person could not justly demand compensation at once for the substance of a thing and for its use. Justice demanded equality between that which was given and that which was received. If a man loaned one hundred dollars, equality of justice required that he receive one hundred dollars and no more.

In those past times, conditions were not the same as exist to-day. As we have seen, the general concept of money was different from that now obtaining. It was looked upon merely as a consumptive commodity. And, as a matter of fact, before the beginning of the nineteenth century, when new systems of industry began, and the introduction of machinery and countless inventions revolutionized business methods, money played but a small part in production. The two factors, labor and nature, were the recognized sources of production.

Yet even in those times, when money would enter into productive industries, there existed always the extrinsic titles, which al-

lowed the taking of interest, and various other methods which permitted a just emolument for money loans. (Cf. Lehmkuhl, *Theologia Moralis*, I, No. 1094. Denzinger, *Enchiridion*, 607.)

In modern times, the conditions that existed during the Middle Ages no longer exist. To-day, the borrowers of money are in many cases the rich and the powerful. They do not need protection, as did the borrowers of olden times.

Again, the use and the concept of money have changed. Loans are not made to-day solely in order that the money may be consumed in supplying the personal wants of the borrower. Another use has arisen for money and another purpose for loans. Money is borrowed for capital to serve in production. Money has become a productive agent. It is sunk in land, houses, machinery, tools, wages, repair funds, transportation; in fact, in all the various agents which aid in production. Money, therefore, is operative, it is fruitful, it adds to itself through its concurrence with labor and the materials furnished by nature.

He, then, who loans a sum of money to-day loans also the power that sum of money has as capital of increasing wealth, and upon the maturity of the loan he is entitled to receive not only the actual amount of the loan, but an added sum in the form of interest, which will pay him for the inherent property money capital possesses, and of the use of which the lender has deprived himself through the loan he has made. Indeed, unless such added sum, the interest, be paid him, the lender would not receive an equivalent for what he has given. Hence, interest is just.

Such is the new concept of money, which has arisen in modern times.

The Church of the past, then, may well be justified for her attitude towards interest taking. When conditions changed, the Church changed in her attitude towards interest. Nor is there contradiction in this, for the matter that fell under her condemnation in the past has changed with the new conditions of commercial life, and has ceased to be the evil that it once was. The Church did not anticipate the social change, she followed rather and conformed her views to the changed conditions.

That the theologians were slow to change their opinion with regard to interest should not be surprising. The changes in economic conditions are matter for economists and not for Churchmen. Besides, the change of conditions was slow and very gradual and not easy of notice except to those connected with economic matters.

It is easy for us to-day to see the changed conditions, but while the process of change was still under way, it was not so easy to detect it.

Even economists and jurists of every denomination denounced interest up to the nineteenth century. If they may be excused, how much more the theologians for the conservative stand they maintained on the subject of interest, which stand, until the recent changed conditions, was undoubtedly justifiable. (Cathrein, *Moralphilosophie*, II, p. 360.)

Objections to Interest. — The objections against interest that have at various times been made may be included under the following heads: —

1. Money is unproductive; one coin cannot produce another; a sum of money may remain for centuries in a vault and it will not increase.

2. The lender undergoes no privation in lending the surplus money which he has, and hence he has no right to receive indemnity in the form of interest.

3. The perpetuity of interest is unnatural and unjust. At the rate of 5 per cent interest, the lender may receive his original loan entire in some twenty or forty years, and in a longer time he will double the loan and still he will retain a right to the original loan.

4. The borrower has to pay back more than he receives and hence there is a violation of justice, which requires equivalence between the thing given and the thing received.

The answers made to these objections have been given more or less fully in preceding pages. They may be again briefly summarized: —

1. Money itself is not productive, but money represents capi-

tal, which is productive. The loan is spent in machinery, wages, salaries, and produces more than itself in the end.

2. There is privation in the technical sense. The millionaire who lends $100,000 deprives himself of the use of that sum.

3. Interest here is like rent. If one uses a farm for a great number of years, he must pay rent. There is no objection to perpetual rent. There is no more reason for objection to perpetual interest.

4. It is true that one who lends $100 receives at the end of the year $105 or $106, which is more than he gave, but here must be taken into account the various factors which justify interest, the fruitfulness of money capital, the use of which the lender deprives himself in loaning money which through production might have resulted in his own enrichment, the time during which the lender is deprived of his money. If only $100 is returned at the end of the year, the lender does not receive an equivalent for what he has given. (Cf. Gide, *Principles of Political Economy*, p. 556.)

Theories of Interest. — Several theories are advanced to explain the reason why interest is due for money loaned, as follows: —

(1) *Productivity.* — Capital is productive. It is invested in workshops, machinery, tools, labor, and these all contribute to the production of articles of value, which through their sale produce an amount of wealth greater than the original amount employed as capital. He who has dominion over a productive source can rightly claim a part of the product. The owner of the capital, therefore, receives a share in the production which has been made possible in part by his capital, and this share is called interest.

(2) *Use.* — The capitalist who furnishes capital to another engaged in some productive industry gives up the use of that capital and thereby gives up to another something which is an economic commodity and has value. The payment he receives for this valuable commodity is interest.

(3) *Abstinence.* — A person who abstains from the present

use of his wealth and devotes it as capital to the production of more wealth, thereby brings about an increase in product. His abstinence is the condition of the increase. This abstinence is rewarded by a certain percentage out of the product, and this is called interest.

(4) *Labor.* — Interest is a reward paid the capitalist for his labor. In what that labor precisely consists, the schools are at variance. According to the English authors, the labor is that performed by the capitalist in producing the capital. According to French writers, the labor consists in saving the capital. Much will power and firmness are required to save.

(5) *Time.* — Present goods are more valuable than future goods. A capitalist deprives himself of his present wealth and looks forward to receiving it back in some future day. A certain premium is due him for this deprivation of what, being a present good, is considered a more valuable thing in exchange for what, being a future good, is considered of less value. This premium is called interest.

The theories set forth above are not contradictory. They may all, indeed, be reduced to the same. Money loaned for productive purposes brings in a return to the lender, because of its productive nature when used as capital. This seems to be the fundamental reason for interest.

Money could not become loaned capital unless the lender deprived himself of the use of the money. Nor could there be such a loan, unless the lender abstained from the present use of his money. Labor, however it is to be interpreted, is again a condition, as is also the element of time.

Again, all these conditions suppose the fruitfulness, the productive capacity which lies in money loaned as capital, and the possibility of these or any other factors as the causes of interest rests upon the productive nature of money. Hence, these several theories practically all express the same principle under different terms.

The Socialist Theory. — There is another theory set forth by the Socialists to explain interest, viz., exploitation. This

is the theory held by Karl Marx. It declares that rent, interest, and profits are due to the exploitation of the working class by the rich. There was a time, according to this theory, when all men were laborers and all were socially equal. But gradually in the course of social evolution some comparatively few individuals, owing to chance circumstances, got possession of all the resources that could enter into production. There came about the formation of the two classes, the rich and the poor. The former possessed wealth and became the directors of all production. The latter had only their labor capacity, which they were obliged to sell at the lowest possible price to the holders of wealth. The rich determined the amount of rent, of interest, of profits, which should return to them for the use of their land and capital, and the working classes were obliged to give the maximum amount of labor for the minimum compensation, in order that the rent, the interest, and the profits of the rich might be increased.

This theory is a corollary of the Socialistic principles, that labor is the measure of the value of all commodities; that labor and nature are the essential factors of production, capital being only subordinate and reducible to labor; that labor has an equitable right to the whole of the product in production. These principles have already been rejected (pp. 40, 41), and a further discussion of the theory will be seen under profits (p. 426) and wages (p. 451).

Rate of Interest. — The rate of interest is the amount per cent that is received by the capitalist for the use of his money.

Most states fix a legal rate of interest, which is the rate charged in the absence of special contract fixing the rate. In most states, again, a maximum rate of interest is fixed within and up to which interest may be determined by contract. This rate in some states is the same as the normal legal rate, and in some states it is higher. Beyond this maximum legal rate, interest becomes usury and is punished by various penalties. In certain states, however, no limit is put to the rate that may be agreed upon by contract.

There is a constant tendency on the part of interest to reach a

uniform level. This is due to the mobility of capital, which is ready to invest in undertakings, wherever they may be, that offer invitingly high rates. The leveling, however, is slow, because the mobility of capital is not perfect. There is an immense proportion of capital which is fixed and cannot easily be moved.

Interest has fallen considerably during past years, owing to the great increase of capital.

There can be no fixed law laid down for the determination of the rate of interest. Many varied factors enter into the field. In general, however, the most salient factors, which determine interest rates, not indeed individually, but collectively, may be embraced in the following list: —

1. *The Amount of Money available as Capital.* — At times, there is a great amount of money in the possession of banks and loan companies which may be dispensed in loans, and in that case the rate of interest demanded will be low. At other times, this available amount will be reduced to a small sum, and if loans are wanted, high rates must be paid.

2. *The Degree of Prosperity of a Country.* — When a country is very prosperous, the individuals of the country save more, more money is deposited in banks and placed in insurance companies, and thus more money becomes available for loans. Again, when great prosperity exists, there is a greater demand for products, and more capital is needed to carry on increased production to satisfy increased demand. As prosperity diminishes, bank deposits decrease, production contracts, and less capital can be obtained and less is needed in the changed conditions. All these circumstances will evidently affect the rate of interest.

3. *The Degree of Success of the Various Business Concerns in which Capital is Invested.* — No two businesses will pay the same rate of interest on their capitals. The rate will depend on the many factors which make for the success of the concerns. Ability on the part of the manager in curtailing expenses, successful competition by which profitable markets are secured, possession of exclusive patents, and many other factors will bring about in certain business enterprises remarkable success

and large returns, out of which high rates of interest may go to the capitalists who have furnished the capital. Other businesses which are not so fortunate must be content with lower rates of interest.

4. *The Degree of Security*, political, legal, moral, existing in a community, and determining the amount of risk capital is exposed to, when invested for various productive purposes. Anything that threatens this security will produce a hoarding of capital and a withdrawal of it from investment.

QUESTIONS

1. What questions are involved under distribution?
2. What is the Catholic view in regard to social conditions?
3. What are the principles of the Socialists regarding distribution? What is your conclusion with regard to the practical application of each of the principles?
4. What is the object of coöperation?
5. What are the views of the Catholic School with regard to distribution?
6. Who are the parties to distribution?
7. What is rent? Illustrate by example. Why has the owner of land a right to rent? Does rent affect the price of foodstuffs?
8. Explain Ricardo's theory of rent. What are its laws?
9. Give an example to show the working of Ricardo's theory of rent.
10. What objection is there to Ricardo's theory of rent?
11. What is interest?
12. Give an historical sketch of interest.
13. How can the attitude of the Catholic Church towards interest be explained?
14. State the objections made against interest. Answer the objections.
15. Mention and explain the various theories of interest. To what can they all be reduced?
16. Explain and refute the Socialist theory of interest.
17. What is rate of interest? What factors determine the rate of interest?

CHAPTER XXII

PROFITS

The Manager. — The name given to the class that receives profits is the manager, or, as the French has it, the entrepreneur.

It means the person who conducts the business, who collects the capital, invests it, labors to make it productive. It means the small storekeeper, the small individual producer, whatever his line of business, as it means the bank president, the director of large-scale industries, and the manager of great manufacturing establishments.

It is he "who organizes and conducts production, deciding what shall be produced, in what amounts, of what varieties, materials, and patterns; and to what persons, at what prices, and on what terms of payment the products shall be sold." (Walker, *Political Economy*, p. 232.)

The qualities required in a successful manager, especially in the great industries, are manifold. He must have knowledge of the technical processes of his business. He must have ability to judge men, and tact in his relations with them; he must be able to choose his subordinates and to win the confidence and good will of all under him. He must have unusual foresight in his commercial dealings, anticipate future demand and prepare for it, guard against loss which may depend on future conditions imperceptible at the present time to ordinary minds, and form a commercial policy that will be at once broad and safe.

He must assume responsibilities and provide against contingencies, shape and direct production, organize and control the industrial machinery. He must have ability to command financial resources. Business is done to-day usually with bor-

rowed capital, and the ability to obtain loans when they are needed will depend in great measure on the credit and reputation of the business manager.

These are some of the qualities which must be possessed by the manager, or entrepreneur. Such men often rise from the lowest grades. More than one half of the present employers, as Marshall, an English economist, remarks, have risen from the ranks of labor. Whenever such men are to be found, there will never be wanting the resources, the capital, with which to undertake great commercial enterprises.

The manager may at the same time be a capitalist and may furnish much or part of the capital employed in the business which he directs. We are here, however, considering him only as manager, and studying the principles which affect the share of the product which he receives as manager. The share which the manager receives is called profits.

The term "profits" has different meanings according to the conception one forms of the class called manager. After the English economists' view, the manager is identical with the capitalist, and the profits of the manager are a capitalistic income, analogous to interest, but fixed at a somewhat higher level than ordinary interest, because of the risks taken by the manager and his personal labor in directing the business.

According to French economists, the entrepreneur is distinct from the capitalist, and his predominant characteristic is the performance of a certain kind of labor. Profits, therefore, in this view, are the remuneration of labor, but of a peculiar kind of labor, differing from manual labor, superior to it from the standpoint of productivity, and consisting of the following factors: —

(1) *Invention.* — The entrepreneur must have ideas, he must invent new methods of production, new varieties of commodities, new wants among the consumers.

(2) *Superintendence.* — Collective labor is more productive than individual and isolated labor only on condition that it is organized, disciplined, and commanded by some one leader. The work must be divided among numerous laborers in such a

way that the best results may be obtained. Good generalship is required in business as it is in war, for business is very much like war. "Everyday experience shows that of two enterprises employing an equal number of workmen possessing the same ability, one succeeds and the other fails miserably simply because one has the better leadership." (Gide, *Principles of Political Economy*, p. 625.)

(3) *Commercial Speculation.*—The great problem in business is not so much to produce goods as to sell them. The ability to create markets, to buy and sell on the most favorable terms, is one of the principal accomplishments of the successful entrepreneur.

Other economists consider the entrepreneur as a monopolist. The monopoly may be a natural monopoly resulting from the exceptional personal abilities of the manager, or from special advantages of situation or opportunity. It may be a legal monopoly due, for example, to a protective tariff or to the exclusive possession of certain inventions. Profits would here be considered as a monopolistic income, a surplus due to the manager because he possesses the monopoly. This monopoly consists not always in the ability of the manager to sell goods above the current prices, but in the possession of a secret or of some advantage which enables him to make goods at less than the ordinary cost of production.

What constitute Profits. — It would at first appear to be an easy matter to determine what actually constitute profits in any business.

Profits are classified as Gross profits and Net profits. Gross profits are the entire returns gained by an industry on the produce of that industry. Net profits are all those returns less the expenses incurred in carrying on the industry and putting the finished product finally on the market.

The real profits, consisting properly of the net profits, may be said to consist of the surplus that remains after deducting the whole cost of production. But the difficulty consists in calculating just what make up the cost of production.

The cost of production includes: —

(1) *Wages* — the amount paid the laborers.

(2) *Interest* — the amount paid the persons who furnish the capital.

(3) *Land Rent* (according to some economists, to be included) — the amount paid for the renting of the land on which the business is carried on.

Thus, the three factors of production — land, labor, and capital — must first take their shares before we can calculate the profits of the manager. But it may happen, and very frequently does happen, that the manager is also the contributor of land, labor, and capital to the business. He contributes the land which he owns in his own right. He contributes all or a great share of the capital employed in the business. He contributes his labor as overseer and director, and his labor is greater and more important and more productive than is the labor of any other employee.

The manager should receive, therefore, rent for his land, interest on his capital, and wages for his labor. And the amounts he is to receive under these several heads may be calculated by estimating what he would have to pay to landlord, capitalist, overseer, if these persons were distinct from himself. The equity of this arrangement cannot rightly be questioned. For if these sums must be paid and reckoned up in the cost of production, it cannot change matters because these individuals, landlord, capitalist, and employee, happen to be one and the same with the manager.

Indeed, in such a case, some would have his rate of interest increased above the current rate, because the return for his capital is variable depending on the state of business, whereas the income arising from loaned capital is fixed.

Again, they would allow the salary or wages to be greater than the salary or wages paid to a hired overseer, because of the greater interest and greater mental strain felt in one's own business than could be experienced by any outside third person.

These various items having been deducted from the product

of the business, the surplus, if indeed any remain, will constitute the profits, and will go to the manager as the manager's peculiar share in the distribution of the product.

That profits, however, will not be great in businesses where absolutely unrestricted competition exists, is declared by many, and Professor Walras went so far as to say that " the normal rate of profits is zero." He goes on the supposition that the price which the entrepreneur pays in the way of cost of production, including the amounts paid to himself as stated above, must necessarily be equal to the price for which he sells the finished product. In other words, because of the strong competition existing in every form of business, the price of the commodity will be equal to or very little above the cost of production, and consequently profits in the strict meaning will be little or nothing.

When, however, the business is protected by being a monopoly, there is no doubt that its profits may be very great, whether because the price of the product may be artificially set high, as, for example, through the possession of legal rights and franchises, or of rare natural agents, or through capitalistic organization; or because, through new inventions and new machinery and more saving methods, the cost of production may be considerably lessened without any lowering of the price of the product.

Even where there exists no monopoly and where perfect competition obtains, we incline to the view that, while there are a great many business concerns which merely make expenses and only just cover the cost of production, there are many which reap profits more or less large, depending among other things on the ability of the manager of the business. The reason for this will appear presently.

Principle Regulating Profits. — The successful conduct of business under free competition is due to two main things — exceptional abilities or exceptional advantages.

Of these two factors, the more important is the former, — exceptional abilities. The great majority of business houses which have become famous in the commercial world owe their rise to the remarkable abilities of their founders, who have won success

with little or no help from opportunity. And there have been many houses once famous, which, in spite of fortunate opportunities, have lamentably failed upon the retirement of the great captain of industry who started them and carried them on to great prosperity. We may, therefore, for the sake of simplifying the matter, consider that success in business arises from exceptional abilities.

The principle usually advanced to explain the existence and the amount of profits is similar to the principle propounded by Ricardo in explanation of rent.

In the case of rent, we had different grades of land due to the different degrees of fertility of the land, and we had land which lay on the margin of cultivation, was cultivated because it paid interest and expenses, but was called no-rent land, paying no rent to the landlord. The moment a parcel of land arose above the no-rent category, it became rent land and paid an amount of rent proportional to the degree in which it surpassed in fertility and proximity to the market the no-rent land.

In the same way with regard to profits, we can conceive all the various business concerns in the world, in a state, or in a community, of whatever nature they may be and whatever their product, to be in existence for the purpose of supplying the demand for their products. This is a true conception. The business concerns in existence exist for production. The ultimate reason for their being is the demand for their products.

Now, if all these concerns were just numerous enough and able to supply the demand, and if the several managers of them were possessed of the same abilities and the same degree of abilities, then all these concerns competing unrestrictedly among themselves would reduce the returns to so low a figure that there would be no profits at all among them, but all would be carried on for the sake of the expenses, including all the items before enumerated. It would of course be profitable to conduct businesses of this kind, but there would be no "profits," technically so called.

There would be here the no-profits stage of industrial society, which corresponds to the no-rent stage which is found to exist

when all the lands under cultivation are still ungraded and sufficient to supply the whole demand for food.

But, as a matter of fact, no such state of affairs exists. Business concerns may be graded in different classes, and the main factor contributing to this grading will be the abilities possessed by the different managers, or entrepreneurs, who direct the businesses.

We may, for the sake of convenience, divide the entrepreneurs into four classes or grades.

1. There are those rarely gifted persons who seem to have the Midas gift of turning everything they touch into gold; whose commercial dealings have the appearance of magic; who are gifted with remarkable foresight and deal in the future as if it were the present; who are of so resolute and firm a temper that they stand unmoved by apprehension, alarms, and even repeated shocks of disaster; "who have such command over men that all with whom they have to do acquire vigor from the contact and work for them as they would not, perhaps could not, work for others." But few belong to this first grade, though we may mention Cornelius Vanderbilt I, A. T. Stewart, Hill, Harriman, Carnegie, J. P. Morgan, as members of it.

2. In the second grade there is a much larger class of business men, of a high order of talent though without genius, men of natural mastery, sagacious, prompt, and resolute.

3. In the third grade are the men who do fairly well in business, who possess in fair degree the qualities which go to make the successful entrepreneur, in whom, however, some mental or moral defect tends to impair these qualities, men who stand often on the brink of danger and failure, yet avoid it by care and diligence.

4. In the lowest grade are the more or less incompetent business men. This class is well described by a writer: "Lower down in the industrial order are the multitude of men who are found in the control of business enterprises for no good reason; men of checkered fortunes, sometimes doing well, but more often ill; some of them perhaps filling a place that would not

otherwise be filled, but more commonly in business because they have forced themselves into it under a mistaken idea of their own abilities, perhaps encouraged by the partiality of friends who have been willing to place in their hands the agencies of production, or intrust them with commercial or banking capital. The industrial careers of these men are not peculiarly happy, though the degree in which they suffer from the constant imminence of loss, perhaps of bankruptcy, is very much a matter of temperament. Some take it extremely hard, and when they fall make no effort to rise again; others are irrepressible as Harlequin, jumping up, alert as ever, after being apparently hanged, drawn, and quartered by the common executioner." (Walker, *Political Economy*, p. 238.)

These are the four grades of managers of business, diversified by reason of the abilities possessed by them. Now, the demand of product is great enough to keep all these classes in actual operation supplying the demand. Otherwise, the business concerns would not continue to do business. But the returns from the several grades will be very different in amount. The lowest grade will receive returns, which, taken in the average, will at least pay the expenses incurred in running the business — wages to employees, including the manager's wages or salary, interest on capital, rent for land. We say, taken in the average, because, although in one year there may be a loss, in the next there will be gain sufficient to counteract the loss.

Again, we said that the returns in this lowest grade will at least pay the expenses, for we cannot suppose that a business would be run during any continued period at a loss.

This grade of business managers may be called the no-profits grade. If any profits at all exist, they will be so small that in our calculation they may be neglected. It will pay the managers to run the businesses, because after all they receive for themselves the salary they could claim were they to hire themselves out to other employers to oversee their business for them.

In the third grade, where managers of greater ability direct the concerns, varying rates of profits will be received, and large for-

tunes may in time be accumulated. In this grade we have the beginning of profits.

In the second and first grades, the profits will be proportionately larger with the greater and higher abilities possessed by the managers.

Under the first-grade managers, especially, the profits will be enormous and rapid and vast fortunes will be made.

In many forms of business carried on to-day, the capital is supplied by persons who buy the shares of the concern. The shareholders appoint a manager or superintendent to conduct the business, and they control the actions of the manager through a board of directors. The manager in this case is not the manager, or entrepreneur, in the technical sense. He ranks as a skilled laborer and receives a fixed salary for the work he performs. His salary or wage is commensurate with his ability displayed in the management of the business. He receives no share in the profits as understood in the technical sense. The profits are distributed among the contributors of the capital, the shareholders, in the form of dividends. In businesses conducted after this manner, it is difficult to distinguish between interest and profits. When the dividends paid the shareholders amount to 50 or 60 per cent of the capital contributed, it would be wrong to classify such returns as interest. The part of the returns that could be rightly classed as interest would be a portion equal to the average rate of interest paid in the country by money invested. The rest is profits and goes to the capitalists, who are really the managers and direct the business through the superintendent they have appointed.

Relation between Profits and Wages. — It is claimed by many that, if a close study be made of the relations that exist between profits and wages, it will be found that profits have nothing to do with fixing the amount of wages paid the laborer, that the exceptionally high profits are not the cause of low wages, and, finally, that it cannot be said that profits are taken out of the wages of labor. We shall endeavor to understand these statements thoroughly, since they have very broad consequences.

The demand for product is so great that it requires for the supplying of that demand the existence and the productive work of the four grades of business concerns *A*, *B*, *C*, and *D*; *A* representing the highest grade, *D* the lowest or no-profits grade. The product is the same, whatever the grade from which it comes.

Now, the lowest grade *D* must pay its laborers wages sufficient to get laborers to work. The wages form an important item in the cost of production, and because the cost of production is as great as it is, the grade *D* can have no profits. The returns simply pay the cost of production.

Profits here have nothing to do with fixing the amount of wages, since there are no profits. Thus, the wages of the thousands of laborers who are employed by business employers belonging to grade *D*, the lowest industrial grade, are in no way affected by profits.

Those employers can pay no higher wages, because, if they were to increase the cost of production by increasing the item of wages, they could not longer carry on business. The cost of production is at present so high that it excludes all profits and allows merely the payment of the necessary expenses incurred in conducting the business. Thus, it is this no-profits grade which fixes the standard of wages.

The employers in the higher grades pay their laborers the same wages as are paid by those of the lowest grades. They find labor at its market value, and they are not obliged to estimate it at a higher value and pay a higher price for it, simply because they happen to have greater abilities than the incompetent employers of the lowest grade, and can reap success and profits where others extort but a mere livelihood.

The higher grade employer effects his success " by his careful study of the sources of his materials; by his comprehension of the demands of the market; by his steadiness and self-control in the presence of temptations to extravagance and wild ventures; by his organizing force and administrative ability, by his energy, economy, and prudence."

The laborers who work for such employers are not entitled to receive higher wages because of the fact that they are laboring under strong, enterprising, energetic men rather than under weak, irresolute, careless men. The labor is the same under each, the product is of equal quality in each concern, the price of the product is the same. That which makes the difference in the returns, it is claimed, is the greater ability of the successful employer.

As a matter of fact, it is the lowest grade of managers which hampers the uprising of the wage earner, for it is naturally the aim of this class to reduce as much as possible the cost of production, in order to increase its returns, to bring itself, if possible, into the category of the profit-bearing grade, and it reduces the cost of production frequently by reducing the wages as much as it dares, seeking out and employing the cheapest labor to be found in the market, engaging the lowest classes of immigrants, to whom, after the starvation wages paid them at home, even the present low wage is wealth; employing in many cases women and children to do men's work.

We said that it is the class *D* which determines the scale of wages received by the wage earner. Let us for a moment consider what would happen if the classes *A*, *B*, *C* were to raise the wages of their laborers, giving them a share of the profits they make.

This rise in wages would of course affect the *D* class. The cost of production would be universally increased.

But, if the cost of production were thus increased by the general rise in wages, all the concerns in the *D* class now in existence and able to survive, because, under present conditions, they can cover the cost of production, wages on the present scale included, would be forced to go out of business. If they went out of existence, the supply of the various products would be decreased by the amount of these products which is now supplied by this class *D*. The demand for products remaining the same, the result would be an increase in the prices of the various products.

This would cause a rise in the cost of living, for many of the products mentioned constitute the necessaries and the comforts of life. The cost of living increasing, the wages although increased would not have the same purchasing power as formerly, and the latter condition of the wage earner in general would not be a whit better than the former.

Another consideration presents itself. If the present scale of wages were increased, thus increasing the cost of production and driving out of business the numberless concerns which make up the lowest grade *D*, the thousands of laborers who find employment in this grade would be thrown upon the labor market.

These thousands of laborers would clamor for admission into the concerns belonging to the grades *C*, *B*, and *A*. But in these, at present, there is no demand for laborers. They have all they need. If these higher grades did not open their doors to the applicants for labor by extending their business and increasing their labor lists, there would be in the labor market a greater supply of laborers than would exist demand for them. As a consequence, competition would spring up among laborers, those out of employment offering their labor at lower prices than the prices paid to those in employment, and as a result the general scale of wages would decrease.

The foregoing discussion of the relations between profits and wages is made wholly from the point of view of the employers. The conclusions arrived at rest on the supposition that labor is a commodity having its fixed market price similar to any other commodity and subject to the law of supply and demand.

It must be borne in mind, however, that among the special qualities which the successful employer possesses, and which make for his great success, is to be found the ability to draw about him a better and a more efficient corps of laborers. His superintendence will have a disciplinary and an educational effect upon the class of laborers he employs, and while the great success he attains will be due primarily to his ability as a manager, it will be due secondarily and in no small measure to the greater efficiency of the workmen under him. This greater efficiency

itself is due indeed to the manager, yet it would seem but just that the laborers who have submitted to the discipline of the manager and have become more efficient under his guidance, should share in a portion at least of the large profits enjoyed by the successful manager.

This matter will be treated again when we come to the subject of wages.

Objections to Profits. — Objections to profits as a feature of commercial life and to the entrepreneur were made many years ago by Robert Owen (1771–1858). He declared that profits were the fundamental cause of all economic ills. The Socialists as a body assert that the present system of economic life, the entrepreneur and the wage earner, is all wrong.

The present system of employer and employee, of master, who owns all the product and can dispose of it as he pleases, reaping all the profits, and of man (workman, slave, wage earner), who contributes only his labor, receiving wages therefor, and who has no claim to the products which his hands have made nor to the profits arising from the sale of them — all this system is merely an "historical category," a chance result of various forces evolved in the course of economic evolution, a feature built upon no necessary principle logically producing this result, but merely a transient state destined to be itself superseded by other states more just and equitable to all parties.

Karl Marx (1818–1883) puts the Socialist objection most forcibly. (*Capital*, 1867.) The employer buys and sells. He buys the labor of the workman. He sells this labor transformed and made concrete in the shape of commodities. The labor has a certain value; the commodity has a certain value. The commodity has taken ten hours of labor in its production. It is worth a labor coupon marked ten hours labor. The workman who has labored on that commodity for ten hours should receive a labor coupon marked ten hours labor for his wage. (Observe that labor is the sole measure of value of all things, according to the Socialist theory.) The values of the labor put into the commodity and of the commodity completed are the same.

Were the workman paid after this system, there would evidently be no profits.

But the employer, says Marx, does not follow any such scale in paying the workman. He looks upon the workman as a machine, to be had for hire in the labor market, and he determines his value as he would determine the value of any machine or commodity; namely, by the cost of production. The cost of production is in this case the expense necessary to make a workman and to keep him in condition to work. But a five-hour labor coupon may be able to cover this expense. The employer, therefore, pays the workman a wage valued at five hours' labor for ten hours' work, and as he sells the commodity which has consumed ten hours' labor for a value equal to a ten-hour labor coupon, he makes a profit on each commodity of five hours' labor.

This explains, according to Karl Marx and the Socialists, these two facts patent in our present economic conditions, that the employers are reaping vast fortunes and becoming richer every day, while the laborers are ever struggling against poverty and barely making sufficient for life.

This statement of the case by the Socialists is intended to show that profit taking is in its very nature a crime, that it is in its essence a spoliation of the wage earner. It is built up, however, on the false theory that value is determined by labor alone, that every commodity is to be valued by the number of hours of labor put into it. If this conception of value is rejected, as it was by us in the discussion of value, the argument of the Socialists must fall.

Of course there are evils in the present commercial system, but they are not all due to the existence of profits. If we would destroy profits as a feature in commercial life, we should be destroying the great personal incentive to production, and what is more serious still, we should be destroying the right of property, a right which, as our Ethics teaches us, is natural to man.

Means Proposed to do away with Profits. — While not ad-

mitting that the profit-receiving portion of the community, the employers, are the sole cause of all the laborers' hardships, yet it must be granted that the employers have in many cases a baneful influence on the condition of the workman. Hence efforts have been made in several directions to do away with the employer as he now exists. Indeed, the Socialists believe that the day is coming when the employer will no longer exist in the commercial world, and they point to the many successful stock companies and corporations which appear to succeed without the entrepreneur, or employer.

(1) *Stock Companies.* — In the stock companies there is no individual employer. In his place are a great number of stockholders, who furnish the capital and accept shares in return. The profits of the industry, instead of going to one man, are distributed in the form of dividends among the multitude of shareholders. The direction and management of the business is intrusted to an employee, who receives no portion of the profits, except in so far as he may be also a shareholder, but is paid a fixed salary. The next step, according to the Socialists, will be to do away with the stockholders, let the government supply the capital, and then all the profits will return to the laborers in the industry.

It must be noted, however, that nearly all these stock companies are managed and controlled financially by some one leading shareholder, who is really an employer, or entrepreneur. Furthermore, in those joint-stock corporations where no individual shareholder appears to control the concern, the absence of the functionary known as the employer is the cause of decided inferiority. The hired superintendent is not as zealous as would be the employer whose whole interest is in the industry. There are absent the individual initiative and the feeling of personal responsibility which can be found only where the employer is in control of the business.

(2) *Profit Sharing.* — Among the systems which have been tried as correctives of the all-profits-absorbing employer, we may mention profit sharing.

Profit sharing is the system by which the wage earner is made a kind of partner with the employer. "Profits, instead of falling exclusively to the latter, are divided, according to some system of sharing, between employer and employees, the workmen thus receiving an addition to their regular wages, if the enterprise has been successful." (Gide, *Principles of Political Economy*, p. 644.)

In France this system has been most successfully instituted. It was first carried out in 1842 by Leclaire, a Parisian house painter. There are now in France over one hundred establishments which have adopted this system. The largest is the Bon Marché, a department store in Paris which employs over three thousand persons and does a business of thirty millions of dollars a year.

Under this system the profits are divided among the employees according to certain conditions determined in advance. Usually the division is made with reference to the amount of wages received and the time of employment. The profits are either paid in money or are placed to the credit of the employee in a savings bank or an insurance association.

The objects aimed at by profit sharing are the following:—

1. To reconcile labor and capital, and to increase the laborer's dignity by transforming him from a mere productive instrument into a partner.

2. To increase the productivity of labor by stimulating the workman's activity, furnishing him an incentive for faithful work, and leading him to feel a direct personal interest in the success of the enterprise in which he is employed.

3. To increase the laborer's income by adding to his ordinary wages (which continue to be devoted to his running expenses) an annual dividend that can be saved or used to meet extraordinary expenses.

4. To avoid loss of employment by attaching the laborer more closely and more permanently to the enterprise in which he has a share.

Profit sharing, as a system, has not met with the approbation

at first anticipated. The Socialists do not approve of it, because it would tend to perpetuate and sanction profits, which they hold to be an absolute evil, a robbery of the laborer by the employer.

Economists of the conservative schools claim that the laborers have no right whatever to profits, since profits are the share of the product due to invention and superintendence, in which the laborers have no part.

It may be said that the laborers have as much right to a share of the proceeds of a business as the shareholding capitalists have. When the profits of a business are great, the shareholders benefit by receiving an increase in the dividends. The income from their investment is increased. An identical process would be carried out with regard to the wage earners, if their wages were increased when the profits are great.

The reasons advanced against this proposition are the following: —

1. In a business run by capital furnished the entrepreneur by contributing capitalists, the capitalists can be aggressive and claim an increase out of the profits by the threat to take their money from the business and transfer it to some other concern. The employer does not wish to lose the present capital and thus be forced to go about searching for new capital.

It may be said that the wage earner may also be aggressive and may threaten to withdraw his labor, unless he is granted an increase of wages. So he does, and hence the strikes. But the inconvenience arising from the withdrawal of labor is not so great to the employer in active business, as would be the withdrawal of capital. Labor may be obtained more easily than capital. There are thousands in the labor market to fill the places of the striking wage earners. Hence the frequent failure of strikes to gain their end.

In stock companies the shareholders supply the funds necessary to the business. They are the real employers and managers who carry on the business through the directors they have elected. They alone as managers have a right to the profits of

the business and to any increase of profits that may arise through the efficient management of the superintendent. If they are not satisfied with the income they receive, they can withdraw their capital from the industry by going out of business.

2. If the employers were to increase the wages of the laborers, when the profits are great, we should have the difficulties already explained on a preceding page.

3. Employers are frequently bound by an agreement not to raise the wages of their employees, so as to prevent the evils which would result to the lowest grades of industries, and although one employer might be able and willing to share his profits with his employees in the shape of increased wages, he will be prevented from carrying out his good purpose through fear of the enmity of his fellow employers, who may have it in their power to injure his business. No man is anxious to make himself a martyr even in a good cause.

There are others who object to profit sharing on the score of the unequal risk which is put on the employer and in which the laborer does not share. If the laborer is allowed to share the profits, when there are profits, ought he not also be compelled to share the losses, when there are losses instead of profits? When such a proposal is made, none clamors more loudly against it than the wage earner. He is willing to share in the advantages, but would not shoulder the disadvantages, and yet they who claim that the profits are in part due to the labor, the efficiency, the acquired skill of the wage earner, ought also to admit that the losses are frequently due to the carelessness in handling machinery, necessitating frequent and expensive repairs, the time loss, the inefficiency, the unzealous labor of this same wage earner.

Again, it must be borne in mind that the employer is human and that the main motive which prompts him to make such strenuous efforts in the management of his business is self-interest. The hope of great profits, which will be all his own, actuates his zeal, his invention, his directive ability. Let it be

understood that his share in the profits is to be but that small part which must necessarily remain after the hundreds or even thousands of employees have received their proportionate share, and we must see at once that the motive and incentive to self-sacrifice and extraordinary effort no longer exist. No mere man will labor as zealously for an advantage which others must share as he will for an advantage which is all his own. Such is human nature, at least as it is found in the business world to-day.

Finally, a difficulty in profit sharing exists in the certainty that "suspicions are likely to arise regarding the employer's good faith in declaring the amount thus subject to distribution, unless the workmen or a committee of them are to be allowed such access to the employer's books and accounts as few business men would willingly concede." (Walker, *Political Economy.* Cf. *Current Literature*, April, 1911.)

(3) *Productive Coöperation.* — Another device for remedying the evils of the present system is the system called Productive Coöperation.

"The aim of coöperation," says Walker (*Political Economy*, p. 343), "is to get rid of the employer and divide his profits among his former workmen, who are to become, for the future, self-employed; to organize themselves, in their own way, for industrial purposes, and carry forward production on their own account and at their own risk."

The first coöperative society was founded in France in 1834 by Buchez, a French publicist, and this system seems to have prospered more in France than elsewhere.

In the United States, the first recorded coöperative association was the Boston Tailors' Associative Union, formed in 1849. It did not last long. In 1868, in Minneapolis, the coopers formed associations of this nature and were successful. Boot and shoe companies and producers of dairy products have found success in the system.

The advantages aimed at by coöperation are: —

1. The securing for the laboring class of that large amount of

wealth which, as we have seen, goes annually in profits to the employer.

2. The opportunity secured for the laborer to produce independently of the employer. Under the present system, the employer determines the nature and the amount of the product. His interest alone decides these questions. If the industry entailed a loss to him, he could shut down part of the work and dismiss the laborers. Under the coöperative system, the interest of the many laborers might determine upon the continuance of production even in dull times, when the returns of the product sold at whatever it would bring would be preferable to nothing at all.

3. The cessation of strikes.

4. The workman would be incited to greater industry and to greater carefulness in dealing with materials and machinery.

5. The workman would be encouraged to greater frugality and to greater saving, having the ready opportunity of investing his savings in his own business.

6. Finally, the moral, social, and political character of the workman would tend to be improved "by giving him a larger stake in society, making his remuneration directly dependent on his own exertions, and admitting him to a participation in the deliberations and decisions of industry." (Walker, *Political Economy.*)

Notwithstanding these advantages, the obstacles that oppose the success of coöperative societies are many and serious. The following are the principal difficulties to be met with: —

1. The want of economic education among the laboring classes. The laborers will ordinarily not have the ability to choose a manager capable of directing a business enterprise; and if such a one be chosen, they will scarcely yield him the almost despotic power or recognize the need of that perfect submission to his orders which contribute much to the success of great industries as carried on at present. If the industry is small, it might indeed be possible to dispense entirely with the manager, for then all the laborers might as a committee of the whole

determine the several questions which enter into production, but such a scheme would be practically impossible in a large industry, where hundreds and even thousands would be employed.

2. The want of capital. Capital is an absolute necessity for production, and the larger the industry, the greater the amount of capital needed. But it is difficult to imagine where laborers could collect the sums necessary for production. Their own possessions are but small, and the security they could offer would scarcely be sufficient to engage capitalists to intrust them with their money.

It may be suggested that the government supply the capital. But, besides the objection that this would be a direct step towards Socialism, such a course would be the worst kind of paternalism, and would tend to destroy utterly the spirit of self-reliance and independence essential to every self-respecting citizen.

This experiment was, in fact, tried in France in 1848. The sum of $400,000 was supplied by the government to coöperative societies. Very little success resulted. Says Gide: "Nothing is easier than to waste money that is freely received, especially when the government is the donor." (*Principles of Political Economy*, p. 650.)

3. Coöperative societies tend to reëstablish the very institutions which they seek to eliminate, the class of employers and the wage system. When these societies have proved successful, very often they shut out all subsequent applicants for admission on the coöperative plan, hire laborers to whom are paid the current wages, and keep for themselves, the original founders, all the profits. Not infrequently the original coöperators sell out their shares at a profit, and some one individual more energetic than the others absorbs the entire concern and passes over to the ranks of employers. Thus the attempt at coöperation has missed its aim.

These difficulties and many others have rendered the efforts at coöperation comparatively unsuccessful. It has met with most success when it has been limited to industries on a small

scale, in which the initial expenditure is small and which aim to supply the local market.

After an experimental trial, in 1909–1910, of the coöperative system at the Furness shipyards in England, under which the employees were to receive 9 per cent of the sums invested by them in the business, and a proportionate share in the profits, the scheme was abandoned by vote of the employees, because it was inconsistent with the principles of trade-unions and tended to injure trade organizations.

As things appear to-day, it seems that the employer, or entrepreneur, is a necessity in the business world, and that the time is not yet come for his supplanting. Indeed, as Walker says: "The power of the master in production — the captain of industry — has steadily increased throughout the present century [the nineteenth], with the increasing complexity of commercial relations, with the greater concentration of capital, with improvements in apparatus and machinery, with the multiplication of styles and fashions, with the localization and specialization of manufactures."

QUESTIONS

1. What is meant by the term "manager"? What qualities should the manager possess?
2. Explain what is meant by the term "profits" according to English economists; according to French economists.
3. What constitute profits in a business? What does cost of production include?
4. Explain the principle that regulates profits. Give an illustration.
5. Are the wages of laborers dependent in any way on the profits of a business?
6. What objections are made against profits by Socialists?
7. State the means proposed to do away with profits.
8. What is a joint-stock company?
9. What is profit sharing? What are the objects aimed at by profit sharing?
10. What may be the reason why the capitalist receives an increase of interest on his capital when the profits of a business increase, while the laborer does not receive an increase of wages under similar circumstances?
11. What is the aim of coöperation? What advantages is it alleged to possess? What are the obstacles to successful coöperation?

CHAPTER XXIII

WAGES

Definition and Explanation. — Wages, in general, means the income received by a person in exchange for his labor.

It is not, however, to be taken in its broadest sense as a remuneration for any kind of labor, for the professional man and highly placed officials give their labor and receive a remuneration which is not called wages. Such remunerations are called fees, salaries. The laborer, then, who receives wages is to be limited to him who is hired and employed by an entrepreneur.

Historical Sketch. — The present wage system is of comparatively recent date. Under the family economy, the wage system scarcely existed. In former times all the work was done by slaves.

In the earlier part of the medieval period, the Feudal System held sway. The productive forces were employed mostly in agricultural pursuits, and the labor was performed by the villains and the serfs for the benefit of the feudal lords and the upper classes composing the nobility. The condition of the serfs was but little removed from that of slaves.

Opposition arose against the power of the feudal barons, and towns were formed, which depended immediately upon the kings, from whom charters were obtained. The kings themselves were willing to establish such chartered free towns, as they thereby secured for themselves aid and assistance against the encroachments and domination of the feudal lords.

Gradually the towns grew. They opened their gates to the multitude of serfs who found existence under their feudal masters intolerable. Such refugees were gladly welcomed, and received the freedom of the town.

The various industries were carried on by individual workers.

These in course of time formed themselves into guilds and crafts, which were partly religious and partly trade organizations.

There were three classes among the tradesmen: —

1. The Masters, who had passed through the lower grades and received the freedom of the town. They were allowed to produce the various commodities of their trades, and offer them for sale in their shops and at the fairs which were regularly held in the town.

2. The Journeymen, who were really more than mere wage earners. They were closely allied to the masters, and aspired to become, and did become, masters in their turn. They worked for the masters and received for their labor a portion of the proceeds of the masters' product. Before becoming masters, they were frequently obliged to show their proficiency by turning out a masterpiece.

As time went on, the journeymen found it difficult to become masters, because of the increase of the masters by reason of the increased population, and because, frequently, the masters sought to prevent the greater addition to their ranks through fear that an increase in their number would reduce their profits.

3. The Apprentices, who were obliged to serve under their masters for seven or ten years, and who received from them the necessaries of life and a small yearly pittance. After learning his trade, the apprentice became a journeyman.

The guilds and crafts gradually came to an end during the sixteenth and seventeenth centuries.

After the beginning of the sixteenth century, while the agricultural industry increased greatly, the manufacturing industries began the wonderful progress which has continued unto our own times.

These industries were carried on mostly within the family. There were no large factories. The product was sold immediately to the consumer; there were no middlemen.

In the eighteenth century came the mechanical inventions which have revolutionized the condition of the working class.

In 1753 the shuttle was invented by Kay; the water frame

by Arkwright, in 1769; the spinning jenny by Hargreaves, in 1770; the mule by Crompton, in 1799. In 1785 the steam engine was utilized in the manufacture of cotton fabrics.

All these and other factors brought about the Factory System, and introduced into the economic world the system of employer and employee. The invention of machinery adapted to every line of trade brought about the same feature in all the productive industries, and through the development of trade, both national and international, throughout the world, there came into existence the capitalists and the gifted promoters, who became the contributors of the capital and the directors of industry, alongside of the wage earner, who contributed the labor.

In the beginning of the present wage system and up to the middle of the nineteenth century, the condition of the wage earner was at its worst. The employees were treated as slaves, the lowest possible amount of wages was given them, the sanitary conditions in factories were appalling, children of a tender age were made to work long hours for a mere pittance and lost all opportunities for mental or physical development, workrooms were overcrowded and badly ventilated, and thousands fell victims to the imperfectly guarded machinery.

Efforts made by the working class to better their condition were frowned upon by governments. In England, in 1800, trade-unions were declared illegal by Act of Parliament, and only in 1824 was the act repealed.

Changes for the better have occurred, however, during the past sixty years, due to trade-unions and systematic organization among laborers, and the labor laws and factory laws, which regulate the hours of labor, affect child and woman labor, insure laborers against accident, sickness, etc., and secure hygienic conditions of employment.

Since capital and labor are the two great immediate causes of all the product that is created, it might be thought that the capitalist and the laborer should be partners and have a share in the product. The course of events, however, has brought about the present state of things, where the capitalist owns all

the product and the laborer sells his labor like any other commodity for a contract price.

There is an advantage in this for the laborer, for he has an assured wage independent of all business vicissitudes, while the capitalist or employer has all the cares of the business. There results an evil also, for the laborer loses all stimulus to production, and he is tempted to do as little as possible and to get as much as he can, thus having in view only the pay which he is to receive for his labor. As we saw, it was the aim of profit sharing and coöperation to overcome this evil.

Time Wages; Piece Wages. — Wages may be Time wages or Piece wages, — time wages, when a definite amount is paid for a definite period of labor; piece wages, when the wages are determined by the quantity of work turned out by the laborer.

Piece wages are in many industries more profitable to the laborer, and they insure a greater amount of efficiency in labor. In some hat factories it is possible for some of the more skillful operatives to earn as much as $18 a week, when paid by the piece.

This kind of wages brings out a distinction between the more rapid and efficient workers and the slow and inefficient, and causes employers to discriminate against the latter. Frequently, too, the employer reduces the amount paid in piece wages as the operatives become more proficient. This reduction brings the wages down to what the employer conceives to be a more reasonable rate, but the less skillful workers thus find their wages reduced below a subsistence scale.

Trade-unions often for this reason object to piece wages, and they either prohibit it altogether or oblige the union members to limit their efficiency to a definite amount of work.

Real and Nominal Wages. — A Nominal wage means the actual amount of money paid the laborer for his labor.

A Real wage means the amount of money paid the laborer, with reference to its purchasing power.

A distinction should be made between real and nominal wages. The nominal figure of the wage has no significance in calculat-

ing the financial status of the laborer. Money tendered as wages has significance only in so far as it will exchange for commodities. A laborer works that he may live, that he may obtain a certain amount of the necessaries, the comforts, and the luxuries of life. The money wage he receives represents a certain amount of those necessaries, comforts, and luxuries.

Causes of Differences between Real and Nominal Wages. — Walker (*Wages Question*, p. 13) shows that real wages may differ from nominal wages because of variations in the purchasing power of money, the form of payment, opportunity for extra earnings, regularity of employment, and duration of capacity to labor.

(1) *Purchasing Power of Money.* — The purchasing power of money will depend on the supply of money. A certain amount of money is needed in circulation to carry on the commercial transactions of the community. When the supply of money increases, the value of money decreases, *i.e.* its purchasing power becomes less. When the supply decreases, the value of money increases, *i.e.* its purchasing power becomes greater.

The effect will be found in the rise or fall of the prices of commodities. The more money there is, the higher the prices; the less money there is, the lower the prices. One of the reasons given to-day for the increase of prices and the greater cost of living is the great increase in the gold production throughout the world.

The purchasing power of money will depend also on the scale of activity in the production of commodities. Other things being equal, when the supply of commodities increases greatly, the prices will fall; when the supply of commodities is curtailed, the prices will rise.

Producers may have it in their power to limit the output of their products, and thus keep the prices up to a high level. Recent investigations have shown this action on the part of many producers of food products, who, instead of putting their produce on the markets, stored it away in cold-storage vaults so as to prevent the fall in prices that would ensue were the full amount of produce to be turned into the markets.

(2) *The Form of Payment.* — The wages of the laborer may not consist wholly of money. Other things may be included in the actual wages received. Such things may be rent, which is allowed the farm laborer who cultivates the land of the employer, or is included in the wages of the factory employees who live in the houses built and let out by the company engaged in industrial pursuits; board, when the laborer on a farm is allowed his board free, or the employee in a factory may receive from the company stores a certain amount of the necessaries of life; certain perquisites and privileges, which may be granted the laborer in certain forms of industry. (Cf. Yearbook Agricultural Dep't, 1910, pp. 194, 197.)

(3) *Opportunity for Extra Earnings.* — The conditions of employment may be such that the laborer can add to his real income by outside industry. It may be that in certain localities the children and the women of the family find occupation, which will serve to increase the sum total of the wages received by the family. Other sources of income may exist in certain families, as when money is saved and put in bank or invested in paying enterprises.

(4) *Regularity of Employment.* — In some industries, employment is intermittent; in others, employment is continuous throughout the year.

Unemployment is due in some cases to strikes, lockouts, the number of holidays observed by a people, the seasons, and in some instances to the nature of the occupation itself, as is the case with agriculture and the fisheries, which can be carried on during only a portion of the year.

(5) *Duration of Capacity to Labor.* — The labor capacity of workmen in different occupations will depend much on the nature of the occupation. Some kinds of labor are by their nature so injurious to the health of those employed in them, that the working period of the employees' lives is comparatively short.

All these factors enumerated by Walker will affect wages, and any computation of the wages of a people or of a special class of laborers would not be satisfactory if it ignored these very sig-

nificant items. No real results could be obtained by the mere mention of the nominal wages received by the wage earner. Account must be taken of the real wages and of all the several factors that tend to increase or diminish real wages.

Other things may affect real and nominal wages. For example,

(6) *Amount of Wages and Value of Product.* — Wages, though nominally high, may be really low if consideration be given to the relation between the amount of wages and the money value of the product turned out by that labor. Thus, when hand work was more in use, it might have taken ten men one month to turn out 1000 articles of a certain kind. After machinery was introduced, ten men working with machinery may have been able in a month's time to turn out 10,000 similar articles.

If the ten hand workers received $600 for the month's wage, and the ten machine workers $800 for the same time of labor, it would appear that the latter were receiving higher wages than the former. Yet, while the wages of the machine workers are nominally higher, they are really lower than the wages paid the hand workers, if we consider the value of the product. For, if one dollar represents the price of the commodity, the product when sold will bring to the former business $1000, and to the latter, $10,000. The wages in the former case amount to $600 per month; the wages in the latter case amount to $800 per month. The proportions 600 to 1000 and 800 to 10,000 represent respectively in both cases the relations of wages to gross receipts.

The wage burden of the second business concern is much lighter than that of the former, and labor, though paid a higher nominal sum in the second case, is really cheaper than the labor in the former case. Thus, high wages do not always mean dear labor. (Cf. Atkinson, *What makes the Rate of Wages?*) There may even be great economy in high wages, due in great measure to the greater efficiency of labor resulting from the increased physical well-being of the laborers. (Cf. Hobson, *The Evolution of Modern Capitalism*, ch. X.)

(7) *Hours of Labor.* — In estimating the amount of wages and

especially in making comparison of the wage scale in different industries and among different peoples or different classes of laborers, account must be taken of the number of hours which constitute a day's labor.

The same nominal wage paid to two men is not really the same if one man works eight hours a day, and the other ten or twelve hours. Nor will the total wage gained by the family be the same where there are restrictions put on certain members of the family in regard to their labor.

Many states have laws relative to the number of hours of labor of women and minors. In some states, sixty hours are prescribed as the maximum number of hours per week for the labor of this class of workers. Recently several states have taken active steps in the regulation of such labor, as follows: Ohio and New Jersey prescribe 55 hours a week for the labor of women and minors; Massachusetts and Rhode Island, 56; New York, Michigan, and Delaware, 54; Kansas, Oklahoma, and North Dakota, 48; Maine, 58.

With regard to adult labor in general nothing has been done by state legislatures. There is a tendency to make eight hours the maximum of hours of labor per day, but it is opposed, on the one hand, by many employers whose product would be thereby considerably limited, and on the other hand, by many of the laboring class for whom it would mean a reduction of wages and a restriction of their earning capacity. Progress has been made in this direction, however, in certain localities, where the eight-hour law has been adopted in regard to government employees and workers in specified kinds of labor, mining for example.

(8) *Standard of Living.* — Attention should also be paid to the nature of the things which the wages of the laborer must procure for him; in other words, to the standard of living of the laborer.

In different countries, the standard of living is very different, and the need of commodities varies considerably. It would be impossible to define a standard of living that would be the same

for all laborers. The standards of the various peoples will depend on long-continued custom, on climate, on social requirements. Even in the same country, as, for example, in the United States, the standards of living are different for different classes of laborers, and although there is a tendency for all to reach the same standard, it takes some time before the tendency is fulfilled. The newly arrived immigrants, who have been used to a low standard of life at home, continue for years perhaps to be content with the same standard here. The Japanese, the Chinese, and the natives of many European countries are not easily or rapidly assimilated, and they preserve their native mode of life for a long period.

It is conceded that the standard of living is higher in the United States than in foreign countries. The normal life of the American laborer demands certain things in the matter of food, lodging, clothing, and recreation, which cannot well be eliminated. There is in truth a danger that the standard aspired to by the American laborer is unreasonable and extravagant. The customs of the country, which bring rich and poor into such close intercourse, tend to promote desires and habits and modes of life among the poorer classes far above the power of their incomes to supply.

There is, however, a reasonable plane to which the laborer may rightly aspire, and it must be admitted that in our country this plane is higher than abroad. The things required by the higher standard will necessitate a greater outlay of money, and this expenditure, surpassing that of laborers in other lands, and reasonably required by the customs and the social conditions of the country, must be estimated in any comparative study of wages.

Theories of Wages. — There is no problem so difficult as to find the law of wages, and none that has called forth so great an amount of literature. The law of wages should formulate the principles which determine the rate of payment for hired labor, and should indicate the causes of its rise and fall. We shall give the principal theories which seek to explain these facts.

General Law of Supply and Demand. — The general law of supply and demand determines the price of commodities. An article will be valued according to the supply of that article in the market and the demand that exists for it in the same market.

The demand remaining the same, the price of the article will be in inverse ratio to the supply; the supply increasing, the price will decrease; the supply decreasing, the price will increase.

In similar manner, the supply remaining the same, the price will be in direct ratio to the demand; the demand increasing, the price will increase; the demand decreasing, the price will decrease.

Any change in the interrelations of demand and supply will have a corresponding influence on the price of the commodity. An increase in both the demand and supply may preserve the relative positions of the two, and leave the price unchanged. An increase in the one factor, accompanied by a decrease in the other, will intensify the ultimate result of the correlations.

This law is applied to labor and to the price of labor, *i.e.* to wages. The price of labor will depend on the demand for and the supply of labor. Labor is conceived as a commodity, and it follows the same law as any other commodity.

The laborer may possess nothing else in the world, but he has his labor, his ability to do manual or mental work of some kind. As he must live, he offers what he has in himself in exchange for the necessaries of life. He has something for sale on the market, his labor. The thousands of other laborers offer the same commodity, and the aggregate of all these offers constitutes the supply of labor.

Just as there are different grades of excellence in a staple offered on the market, so there are different grades of excellence in labor. Labor may be unskilled labor or skilled labor, and the skilled labor may embrace numberless grades of efficiency dependent on the various trades and industries operative in the great scheme of production. The values of labor of different kinds will be affected by the supply of these different kinds of labor.

Factors affecting Supply of Labor. — There are several factors which affect the supply of labor; namely, the increase of the population by natural means and by immigration, the employment of women and children, and the influence of labor unions.

Population tends to increase itself by natural means in geometrical progression, and, from this fact alone, there is the prospect that the supply of labor is gradually tending to become so great that the value of labor will gradually diminish, and wages will fall to a low level. The calamitous tendency is counteracted by the facts that production may as gradually increase, and thus increase the demand for labor, and that the increase of population is arrested by death, disease, famine, and accidents. Adherents of the Malthusian doctrine would advocate that the positive checks to overpopulation are not sufficient to counteract this tendency, and that a negative check, moral restraint with regard to marriage and the procreation of children, should be practiced. (This doctrine has already been discussed, and its impracticability and moral danger pointed out, on pages 86, 87.)

Immigration, especially in a new and prosperous country, is an abundant source of the increase of the supply of labor. The population of the United States has increased greatly through this source. The opening up of new industries, the unbounded wealth of the country, which gave a wide field for the successful investment of capital, have attracted the labor of foreign lands and have filled the labor markets. Legislative measures have been taken in this country to restrict the importation of skilled labor, so as to prevent the reduction of the value of such labor in the market.

Another factor which affects considerably the supply of labor is the admission of the labor of women and children. Since the introduction of machinery into factory work, many employments not requiring a great amount of muscular strength can be filled by women and children. The several states of the United States have passed laws restricting the previously unlimited employment of women and children.

The labor unions have an effect on the supply of labor in cases where they set limitations upon the persons who shall be engaged by employers, determine the hours of labor, or restrict the output.

"The restriction of the output of individual workers is accomplished in several ways: by adopting a normal day and discouraging or prohibiting overtime; by limiting the daily task or the earnings of piece workers; by discouraging or prohibiting the grading of time workers, and thus leveling wages; by forbidding piece work, time work, contract jobs, or the butty system; and, in some cases, by encouraging the go-easy system of secret loafing or the 'adulteration of labor.'" (*International Encyclopedia*, "Trade-Unions," by R. T. Ely and T. S. Adams.)

Demand for Labor. — The demand for labor is represented immediately by the call of the employers for laborers to carry on the various industrial enterprises in which they are engaged. The employers desiring labor apply in the labor market, and seek to get labor at the lowest price at which the laborers are willing to sell. The demand will depend on the state of trade, on the degree of prosperity existing in the productive industries. When there is exceptional prosperity, there will be great demand for labor; when trade languishes, there will be a falling off in the demand.

Rate of Wages. — The rate of wages will depend on the relations existing at different times between demand and supply. Any circumstances which affect these two factors, demand and supply, will affect wages. Where competition is wholly unrestricted, wages will naturally tend to reach the lowest level of valuation which will furnish the mere subsistence of the laborer. When the supply of labor is abundant, there will always be found large numbers who will be willing to offer their labor at very low prices, and these will tend to make a general low average rate of wages.

The rate of wages will not, however, be the same throughout the extent of even one country, for, while there is a certain

mobility to labor, whereby it moves about from place to place, depending on the attraction of higher wages, many influences exist to prevent this mobility from being absolute.

A great number of laborers are confined to one locality through the want of funds sufficient to enable them to obey the call of higher wages from some distant locality.

Many are so attracted by the allurements of city life that they prefer to work for low and uncertain wages in the crowded city industries rather than to accept the really higher wages of a country occupation.

Habit, defective education, and want of energy will prevent many from leaving the fields they are accustomed to, and will cause them to fill up the overcrowded markets, with the result that wages cannot rise.

Trade-unions could affect the general rate of wages by determining a minimum rate at which their members would offer their labor to the employers. They have indeed accomplished much in this respect, but their efforts are necessarily restricted by the fact that but a comparatively small percentage of the labor force in the country belongs to the unions.

The rate of wages is, of course, affected by every increase in the supply. Where there is a continual accession from abroad of low-grade laborers, who are content with low wages, or where women and children compete with men, the scale of wages will be kept low. If women and children could be kept out of the field of competition, and if the inroads of the foreign element could be prevented, the wages of the remaining men would considerably increase.

The law of supply and demand, as applied to wages, is, as Gide says, abandoned to-day by many, because it "lacks scientific precision and completeness." (*Principles of Political Economy*, p. 496.)

Wages-fund Theory. — The wages-fund theory supposes a fund, whether in actual permanent existence or in continuous flow, from which are drawn the wages paid to all laborers.

This fund is created by production both present and past, and

consists of the total amount of wealth that is devoted to present or future production; in other words, of capital.

The wages-fund theory is the theory of the Classical School. It is the law of supply and demand more precisely stated. Supply is represented by the laborers who hire out their labor; demand is represented by the capital that is employed in production. The whole amount of capital in the country is one factor. The whole number of laborers in the country is the other factor. The rate of average wages will be determined by the ratio between these two factors. If we divide the capital by the number of laborers, we obtain the average rate of wages in the country.

J. S. Mill puts the theory thus: "Wages depend mainly upon the demand and supply of labor; or as it is often expressed, on the proportion between population and capital. By population is here meant the number only of the laboring class, or rather of those who work for hire, and by capital, only circulating capital, and not even the whole of that, but the part which is expended in the direct purchase of labor."

And further: "Wages (meaning, of course, the general rate) cannot rise but by an increase of the aggregate funds employed in hiring laborers, or a diminution in the number of the competitors for hire; nor fall, except either by a diminution of the funds devoted to paying labor, or by an increase in the number of laborers to be paid." (*Political Economy*, Vol. I, pp. 328, 329.)

Ricardo declares that "the market price of labor is the price which is really paid for it, from the natural operations of supply and demand. Labor is dear when it is scarce, and cheap when it is plentiful." (In T. Brassey, *Work and Wages*.)

The wages cannot at any time be greater than is warranted by the sum total of the capital. If more wages are given to any one kind of laborers or to the laborers in one district, less wages must be given to the other kinds of laborers or to laborers in other districts.

Causes of General Rise of Wages. — A general rise in wages

would be due to two causes: an increase of the capital, or a decrease in the number of laborers.

An increase of the capital could be brought about by an increase in the output of production, by greater prosperity in the various industries, which would add to the sum of wealth from which a portion could be set aside as an addition to capital; or, by a greater degree of saving on the part of capitalists in the form of personal economies, and the conversion of the resulting wealth into capital.

A decrease in the number of laborers could be brought about by any of the several means whereby the labor population would be lessened. Such means would be, according to the theorists, the Malthusian doctrine with its various kinds of checks to the increase of population, the arrest of immigration, the withdrawal of women and children from the field of labor.

Defenders of the Wages-fund Theory. — The wages-fund theory was propounded by some of the most eminent economists. It was defended by Adam Smith, Malthus, Ricardo, J. S. Mill, Fawcett. It was generally accepted by English economic writers during a great part of the last century. Modern economists have abandoned the theory.

Objections to the Wages-fund Theory. — It is mere fiction to say that there exists a fixed and definite sum of capital obtained by past production out of which labor is paid. What portion of past wealth will be set aside as capital depends so greatly upon indefinite and indeterminate factors — for example, the condition of business, the activity of promoters, the degree of sacrifice on the part of the owners of wealth, the will of capitalists — that it would be impossible to obtain a definite figure which could be called a wages-fund.

It would be equally impossible to obtain any definite figure for the average rate of wages, because, while the so-called wages-fund is indefinite, the number of laborers is also indefinite, being subject to variable circumstances, such as the condition of industry, the constantly changing accessions to labor, the will of the laborers to put their labor on the market.

Moreover, the capital which is put into production is not all devoted to paying wages. Much of it is devoted to the establishment of plants, to the setting aside of various kinds of reserve funds, to insurance, etc. Much is devoted to paying what are more technically called salaries. (Cf. Antoine, *Cours d'économie sociale.*)

Finally, as Walker shows, wages are dependent on the product of present industry, and are paid out of the sum of this product. It indeed seems absurd on the face of it to think that wages in any industry could be determined by factors extraneous to the item of the value of the product of that industry. Although in some cases and in some degree, wages are paid out of a previously accumulated capital, yet, as a matter of fact, wages for the most part are obtained from the proceeds of the sale of present product, either actually acquired or advanced upon loans for which those proceeds are the security. (Cf. Walker, *Wages Question*, ch. IX.)

Iron Law of Wages. — The Iron Law is the theory of the Socialists, and it is strongly emphasized by them in order to show the injustice and the hardship of the present social conditions, and to hasten the day of the acceptance of Socialism as the only possible remedy.

It is an application of the theory of supply and demand. Labor is conceived as a commodity. Its price is determined, like that of any other commodity, by the cost of production.

The laborer according to this theory is a machine. What is the expense incurred in the case of a machine in a workshop, supposing the machine to be offered free to the employer? Evidently, the cost of running the machine, of keeping it in good working condition, of keeping it in repair, of supplying its place with another machine when the old one has exhausted its utility.

The laborer is conceived to be just such a machine. He presents himself to the employer and is installed in a certain place in the factory. He must live and keep up the strength necessary to perform his work. His wages must be at least sufficient to keep

him alive and to give him the strength required for labor. It must be sufficient to enable him to produce a successor to himself in the same work.

What the actual amount of wages will be is determined by the supply of labor relative to the demand. It cannot fall for any length of time below the point where the wages will sustain the laborer, for if it did, the supply of laborers would be decreased by disease, famine, death, emigration, the reduction of offspring, and, the supply diminishing, the demand would be relatively greater and would cause the price of labor to rise.

On the other hand, according to the iron law, wages cannot rise for any length of time above the sustenance point, because the improved condition of the laboring class, under the increased wage, would bring about an increase of marriages and an increase of laborers, and, in the case of any one particular country, an accession to the ranks of labor from other lands, where the wage increase had not been made, and, as a result of this increase in the supply of labor, the price of labor would fall again to the sustenance level.

Sustenance may mean the maintenance of life, so far as to keep body and soul together, or it may mean the maintenance of life in that condition called for by the standard of life habitual to the laborer. This standard may be different among different peoples. If the standard be such that it includes all the necessaries of life, most of the comforts, and some of the luxuries, and if the wage be sufficient to keep the laborer up to such a standard, the theory goes beyond the purpose of the Socialist inventors and ceases to be the law of iron.

The standard of living is, therefore, represented as being that enforced standard wherein merely a bare subsistence is received through the wages offered to labor. The Socialists point to the prevalence of poverty among the great mass of mankind, to the fact that the great majority of wage earners are obliged to accept a wage wholly inadequate to the maintenance of any standard above that of mere sustenance, as a patent verification of their theory, the law of iron.

It has served in their hands to intensify the enmity between the capitalist class and the labor class, and to argue the necessity of Socialism as the only means of helping the masses of the people.

Objections to the Iron Law of Wages. — The theory is rejected by all who are not Socialists, because it does not explain existing facts.

Wages are not the same in all trades, nor are they the same in all countries, and yet the level of sustenance does not vary to such an extent as to require more for one kind of laborer than for another, or for one nationality than for another. Other factors besides sustenance seem to influence the rate of wages.

Moreover, perfect competition is supposed to exist in the operation of the law, and yet at the present time, and indeed at all times, there are and have been many causes which have prevented perfect competition. Among such causes have been the legislative measures of different governments affecting wages, limiting immigration, determining the hours of labor, restricting the labor of certain kinds of laborers; the trade-unions, the regulations of which often determine the number of laborers and the nature of their labor, and the limit of wages for which they may work. (Cf. Gide, *Principles of Political Economy*, p. 502.)

Productivity Theory of Wages. — Production is occupied in turning out a certain amount of product. The product is sold, and the proceeds go to pay each of the factors of production.

Part will go to the landowner, who has furnished the land; part to the capitalist, who has given the capital; part to the employer, who has directed the industry; and part to the laborer, who has given his labor.

The product, therefore, according to the productivity theory of wages, is the source of all the returns which go to the several factors of production. The returns which go to land, capital, and employer are fixed and determined by laws. The part which goes to labor is determined by the law of the productivity of labor.

Wages arise because labor is productive of a product which

can be estimated in money value, and has a right to a certain portion of the proceeds. The other factors have their claims upon the proceeds. Labor, in like manner; and the amount of the proceeds which goes to labor, according to this theory, will be the sum of the proceeds remaining after the other factors have received their shares. The amount of the proceeds that may be distributed in wages will depend on the degree of the productivity of labor. The more efficient the laborers, the greater will be the sum total of the proceeds, and the efficiency will be increased by all the several factors which help towards the increase of the product.

Objections to the Productivity Theory of Wages. — This theory, proposed principally by Walker in *Wages Question*, is opposed by many as too optimistic and as contrary to facts.

The productivity of labor has increased immensely during the past century, owing to the introduction of machinery, the increased intelligence and proficiency of the laboring class, the application of inventive genius to mechanical contrivances, and other causes, but the increase of wages has not been at all in proportion to the growth of productivity.

Again, although the proceeds of production have increased considerably, the actual share of labor in the proceeds has not proportionately augmented. The working out of the law of productivity, whereby with an increase of the proceeds of production a greater share ought to go to labor, has been defeated by trusts and combinations of capital, and by aggressive competition among employers, so that the lion's share of the augmented proceeds is absorbed by the employing class.

If it be said that the theory does not actually explain existing facts because the condition of full and complete competition is not adhered to, the theory becomes a mere fanciful doctrine of no practical use.

Catholic Doctrine of Wages. — *Prevalent View of the Laborer.* — The general view taken of the laborer is to conceive him as an individual offering something for sale. He offers his labor. A contract is entered into between the employer and the laborer.

The contract calls for a certain amount of labor on the part of the laborer, so many hours of work during a day or a week, or some particular kind of work to be accomplished under definite conditions, and on the part of the employer a definite sum of money, which shall be paid the laborer on the completion of the work.

No other consideration is generally supposed to enter between the employer and the laborer save the legal obligation imposed by the contract that has been willingly agreed upon by both parties. The work accomplished, the wages are paid, and the transaction closes.

The Catholic View represents the laborer as endowed with personal dignity. He is a person possessed of certain characteristics of mind and heart, an intelligent and a free being, owing allegiance to God, raised to a supernatural order, destined to a spiritual and a supernatural end, gifted with certain inalienable rights which his fellow man must recognize and respect.

In contracting to sell his labor, he cannot divest himself of his natural dignity. While the intellectual and moral elements that enter into his composition do not come directly into the matter of his labor contract, which directly affects his actual material work, yet indirectly they do enter into the contract, since the laborer, in hiring out his physical force, includes in it his personality and his dignity as man, and cannot help but do so. (Cf. Th. Meyer, *Institutiones Juris Naturalis*, II, No. 248.)

Hence, in the contract entered into between employer and laborer, there arise certain obligations in strict justice, on the part of the laborer, on the one hand, to fulfill exactly all the requirements of the labor contract, on the part of the employer, on the other hand, "to respect and safeguard the inalienable rights of the laborer, such as the right to liberty of conscience, to life, to the preservation of health, to morality." (Antoine, *Cours d'économie sociale*, p. 318.)

Source of Catholic Doctrine. — From this fundamental view of the laborer, there arises the Catholic doctrine of wages. The main source of the doctrine is to be found in the Encyclical *Rerum Novarum* of Pope Leo XIII. The Encyclical says: —

" We now approach a subject of great and urgent importance, and one in respect of which, if extremes are to be avoided, right notions are absolutely necessary. Wages, as we are told, are regulated by free consent, and therefore the employer, when he pays what was agreed upon, has done his part and seemingly is not called upon to do anything beyond. The only way, it is said, in which injustice might occur would be if the master refused to pay the whole of the wages, or if the workman should not complete the work undertaken; in such cases the state should intervene, to see that each obtains his due — but not under any other circumstances.

" This mode of reasoning is, to a fair-minded man, by no means convincing, for there are important considerations which it leaves out of account altogether. To labor is to exert one's self for the sake of procuring what is necessary for the purposes of life, and chief of all for self-preservation. 'In the sweat of thy brow thou shalt eat thy bread' (Gen. iii, 19). Hence a man's labor bears two notes or characters. First of all, it is *personal*, inasmuch as the exertion of individual strength belongs to the individual who puts it forth, employing such strength to procure that personal advantage on account of which it was bestowed. Secondly, man's labor is *necessary;* for without the result of labor a man cannot live; and self-preservation is a law of nature, which it is wrong to disobey. Now, were we to consider labor so far as it is personal merely, doubtless it would be within the workman's right to accept any rate of wages whatsoever; for in the same way as he is free to work or not, so is he free to accept a small remuneration or even none at all. But this is a mere abstract supposition; the labor of the workingman is not only his personal attribute, but it is necessary; and this makes all the difference. The preservation of life is the bounden duty of one and all, and to be wanting therein is a crime. It follows that each one has a right to procure what is required in order to live; and the poor can procure it in no other way than through work and wages.

" Let it be then taken for granted that workman and employer

should, as a rule, make free agreements, and in particular should agree freely as to the wages; nevertheless, there underlies a dictate of natural justice more imperious and ancient than any bargain between man and man, namely, that remuneration ought to be sufficient to support a frugal and well-behaved wage earner. If through necessity or fear of a worse evil the workman accept harder conditions because an employer or contractor will afford him no better, he is made the victim of force and injustice."

Sufficient Wage a Matter of Justice. — The wage of the laborer, according to the Encyclical, is a wage "sufficient to support a frugal and well-behaved wage earner," and this wage should be paid the laborer as a matter of strict commutative justice. There is thus established a minimum wage which the employer is bound to pay the laborer, and anything below this minimum wage will entail injustice on the part of the employer.

Commutative justice is that division of justice which concerns individuals and demands equivalence between the object accepted and the compensation given. In the present case, the object offered by the laborer is his labor; the compensation given is the wage granted by the employer.

There must be equivalence between the two, and the Catholic doctrine holds that such equivalence will exist only when the wage given by the employer is at least an amount "sufficient to support a frugal and well-behaved wage earner."

Personal Wage; Family Wage. — Difficulty arises when an attempt is made to determine what shall constitute this "sufficient" wage, as set forth in the Encyclical. The laborer may be considered as an individual or as the head of a family. Shall the sufficient wage mean a personal wage or a family wage? — a wage sufficient to support the individual laborer, or a wage sufficient to support himself and his wife and children?

Several Catholic writers insist that the wage referred to in the Encyclical and required by strict justice is a family wage, sufficient for the support not only of the laborer but of an actual or a possible family.

A just wage is such as will enable a man to secure all that

belongs to a normal and reasonable life, all that will conduce not only to self-preservation, but also to self-propagation.

The married state is an essential condition of a man's normal life, and his remuneration as a laborer will not satisfy justice unless it is sufficient to maintain a family. Normally, man is looking forward to marriage, if he is not already married, and hence the laborer, whether single or married, is in justice entitled to a family wage. (Cf. J. Ryan, *A Living Wage*, ch. VI.)

Other Catholic writers, while not admitting that the wage mentioned in the Encyclical is the family wage, and while allowing that the family wage is not demanded by strict justice, hold that the laborer is entitled to a family wage on the ground of social order and the common good of society (*titulo naturalis honestatis*).

Social order requires that the members of society be able to fulfill their duties as heads of families; that families, the constituent elements of society, be enabled to live and propagate. The common good of society must certainly embrace the good of those who form the greater proportion of society. Hence, the wage received by the laborer must be sufficient for the sustenance of his family. (Antoine, *Cours d'économie sociale*, p. 606.)

Amount of Just Wage. — Assuming that a personal wage is the wage in question and that it should be a living wage, further difficulty appears in determining what definite amount would constitute a living wage.

No definite sum can be fixed on, for a living wage will differ in different lands, in different localities of the same land, in city and in country, and it will be further differentiated by the standard of living, the cost of living, the customs and habits of various kinds of laborers, and other circumstances already referred to in a preceding part of this discussion of wages.

Yet, although the problem presents difficulties, it should not remain an insoluble one. It should be possible to arrive at a figure that would prove a sufficient income for a laborer and enable him to obtain a just proportion of the necessaries, the comforts, and some of the luxuries of life.

Great progress has been made in statistical studies in our day, and from such studies it has been learned that the major part of the working class are obliged to be content with a wage below a decent living wage. Through similar means it might prove possible to determine for various classes of laborers the amount that could reasonably be considered a just and sufficient wage.

The most reasonable method of fixing upon a living wage appears to be that proposed by Antoine (*Cours d'économie sociale*, p. 603); namely, that it be decided upon by the employers and laborers themselves after mutual deliberations and conferences.

Suspension of Obligation. — It must be remarked that the doctrine of a living wage as referred to here will hold in normal industrial conditions. It may be that in a time of general industrial paralysis employers would have to reduce wages or stop work altogether. In such cases the laborers should be content to receive a lower rate of wages rather than face the alternative of having no work at all.

In cases where the returns of a business are very low, as in those industries which barely make expenses, viz., interest, rent, and a rate of wages lower than the living wage, — those industries, in other words, which belong to the no-profits class, — it would be impossible to exact the payment of a living wage. In such cases, the obligation binding in justice would be suspended. Added hardship would be imposed on the laborers, if they were deprived of even the small wage such industries are able to pay.

Can the just wage be fixed and determined with a view solely to the status of the laborer and irrespective of the other factors that enter into the production of wealth, and should the living wage be insisted on as a matter of justice, without any regard to cost of production, to amount of product and other factors, which affect production?

Low Wages Result of Distribution, not of Production. — The poverty of the working classes is, upon the admission of probably all economists, not due to production. During the past one hundred years, production has advanced with immense strides, and the increase has been remarkable. The evil is, therefore, not

the result of production, but rather of distribution, or the manner in which the money proceeds of the product have been apportioned among the several factors that have contributed to the product.

There is enough reasonably and justly to satisfy all these factors, if reason and justice were allowed to affect the distribution; but as a matter of fact the capitalist and the entrepreneur exact the greater share of the proceeds of production, and as a result, little is left to be distributed among the wage earners.

Method of Establishing Just Wage. — We come now to consider the method by which the establishment of a living wage could be brought about.

Direct Intervention of State. — Some writers advocate the direct intervention of the state, which by law would determine for all the various industries the minimum wage that could be paid by employer to laborer. If such a law were unconstitutional, as it would be claimed to be in the United States, the Constitution should be amended, assert these writers, so as to permit the passage of the law. (Cf. Ryan, *A Living Wage.*)

While admitting that the state would in the abstract have the right to fix such a wage, on the principle that it is the right and the duty of the state to prevent injustice to any one or any class of the citizens, others object to the actual establishment by state law of such a minimum wage. Their objection is based on the following reasons: —

1. The moral impossibility of fixing a definite living wage in the midst of the difficulties arising from differences of times, places, industries, country and city life, and cost of living. The law once made would have to be changed continually, because of the ever-changing conditions.

2. The heavy burden imposed on employers, whose books would have to be examined in order to find out the returns made by the industries they were engaged in.

3. The hardship resulting to the laborers themselves, who in times of industrial depression would have to forego even the low wages the industries were able to pay.

4. The insurmountable obstacle arising from the fact that it would be impossible to obtain a universal and international law determining the living wage, and yet such a law would be necessary, on account of competition, through which countries with underpaid labor could produce at lower cost and undersell the countries enforcing the minimum wage. (Cf. Antoine, *Cours d'économie sociale*, p. 627.)

Indirect Action of State. — Where direct intervention of the state is deprecated, because of the objections mentioned, and because such intervention would be an approach to Socialism, indirect action of the state is advocated. Such action of the state would take the form of

1. Reduction of taxes affecting articles of general consumption; more particularly in the United States, a modification of tariff imposts which prevent the free entry into the country of such articles of general consumption.

2. Greater restriction of the labor of women and minors, thus reducing competition and opening up greater demand for the labor of men, and allowing an increase in the wages of men.

3. Regulation of trusts and the prevention of combinations of employers, for the purpose of keeping wages low.

4. Encouragement of agricultural pursuits, so as to increase the supply of the necessaries of life and thus diminish the cost of living.

5. Extension of the Employer's Liability Act to all classes of laborers, and the enactment of such an act as would save the injured laborer or his family the tediousness and the expense of long litigation.

6. Encouragement of trade-unions, and the enforcement of arbitration between employers and laborers in cases of strikes.

7. Establishment of Labor Bureaus, which would seek to find employment for the unemployed.

8. Encouragement of Beneficial Societies, which could enable the unemployed laborers to tide over a period of enforced unemployment, and provide sickness and death benefits.

9. Greater facilities for saving among the poorer classes

through the increase of savings banks and the wide diffusion of the postal savings bank system.

10. Encouragement of Industrial Insurance among the working class, at such low rates that its advantages could be brought within the reach of all.

Public Opinion. — Much could be done through the forming of public opinion, so that a greater degree of fairness and justice would be granted by the employer to the wage earner. Here lies a field for the Christian teacher, wherever he may be found, who, by constant insistence and enlightened doctrine, can bring home to the business man the propriety and the need of just dealings with the laboring class.

Instances are not wanting, although lamentably few, of a growing considerateness on the part of employers towards employees. The action of certain great railway systems in granting pensions to employees of long service, the social work at the Krupp foundries in Germany, the methods adopted for the betterment of employees in some of the great industrial establishments of this country, the spontaneous granting of increases of wages in many branches of industry in recent times, all indicate the awakening of a more kindly spirit and a sense of justice among the employing class.

QUESTIONS

1. What is meant by wages? Who constitute the wage earners?
2. Give a brief historical sketch of the rise and development of the wage system.
3. What are time wages? Piece wages? Which is the better form of wages for the laborer?
4. What is the distinction between nominal and real wages?
5. Explain the causes that affect the real value of wages. Give practical examples where possible.
6. State the different theories that seek to explain wages.
7. Explain the law of supply and demand. What factors affect the supply of labor? What represents the demand for labor? How is the rate of wages determined according to this theory?
8. Explain the wages-fund theory. What are the objections to the theory?

9. Explain the iron law of wages. What are the objections to the theory?
10. Explain the productivity theory of wages. Give the objections to the theory.
11. What is the prevalent view held to-day of the laborer? Give a more reasonable and more just view.
12. What are the sources of the Catholic doctrine of wages?
13. What is a just wage according to the Encyclical of Leo XIII?
14. What is meant by personal wage? Family wage?
15. What constitutes a sufficient wage?
16. When is the obligation to pay a just wage suspended?
17. What is the cause of low wages?
18. State the objections to direct intervention of the state in fixing the amount of wages.
19. How could the state indirectly relieve the condition of the working class?
20. What is the power of public opinion in this matter?

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